ON SARSAPARILLA

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SARSAPARILLA,

AND SARSAPARILLA SO-CALLED:

A Popular Analysis of a Popular Medicine;

ITS NATURE, PROPERTIES, AND USES;

HOW TO INSURE ITS SUCCESS AS A REMEDY;

THE MOST APPROVED FORMS;

AND

THE VARIOUS PHASES OF DISEASE IN WHICH IT MAY BE ADVANTAGEOUSLY EMPLOYED.

By LINNÆUS SMILAX, M.D.

LONDON:
AYLOTT & CO., 8, PATERNOSTER ROW.

1854.

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PREFACE.

Sarsaparilla, from its wide-spread celebrity and popularity as a *depurative* or purifier of the blood, having now become almost everybody's medicine, everybody very naturally seems anxious to know something about it, something more than by mere name. Properly speaking, sarsaparilla constitutes a branch of Materia Medica; and, taken in the routine of such works among other medicinal substances, it may be found briefly described under that head as far as space will allow; but hitherto no *special* work has ever been devoted to the subject. Indeed, there has long been an acknowledged want of one, more particularly as regards popular information, the public having no guide whatever to direct them in the choice or application of this remedial agent, nor any means of making themselves acquainted with the various forms of disease it may be rationally employed in. That the necessity of such a manual of direction must have been felt by many undergoing a course of the medicine, there can be no doubt. Therefore, with a view of filling up this void, the following pages have been prepared. How far they may be able to supply the deficiency, and prove of service to the suffering portion of the community, remains to be seen; at all events, when persons

unacquainted with the nature, properties, and uses of this drug and its various preparations, inquire "*What is Sarsaparilla? Where does it come from? What is it for?*" and so forth, hereby they may solve the problem; while, when about to take it, having read the book, they will be better enabled to distinguish the difference between *Sarsaparilla* and *Sarsaparilla so-called.*

Perhaps, at first sight, such an investigation may appear of little moment to the general reader; but upon further search it will be seen, from the great utility of the genuine forms of the medicine, the failure of inferior ones, and the far worse consequences frequently experienced from those deleterious compounds substituted for it, that really the subject of Sarsaparilla is so little understood, that almost any nostrum (*especially if cheap*) put forth in its name passes as such among the majority of persons who know no better. Now if the public desire to have the full benefit derivable from the legitimate forms of this remedy, in the relief of the numerous complaints for which it is now so extensively employed, and at the same time protect themselves from *imposition*, it can only be through a more intimate acquaintance with its character and uses, and under what circumstances its value as a curative agent may be with more certainty reckoned on. The best way of combating quackery and encountering error is by enlightening the community on the matter, and putting them in possession of such positive information on the subject as shall qualify them to judge for themselves; for we may reasonably assume that where persons are thus armed, duplicity

and imposture have less chance of success; indeed, had the contents of these pages no other claim on the reader's consideration, in this respect alone they are deserving of notice, as a means of preventing in many instances much suffering both in pocket and person.

Having by *chemical analysis* satisfied myself of the dangerous nature of some of these base nostrums at present being palmed upon the public under the pretended title of Sarsaparilla, and in several instances witnessed very serious results from their use (to say nothing of the imposition in a pecuniary sense), I began to think it high time some one conversant with the facts should come forward and warn the unsuspecting against such a serious source of mischief. It may be a little out of the usual track of the medical man, but of none the less service to society in the long run. Indeed, the same instinctive impulse that prompts us to fly to a fellow-creature in the moment of danger, to set a broken limb, take up an artery, reduce a dislocation, dress a wound, decompose a poison, or lessen and alleviate human suffering in any other shape, equally prompts us to come to their rescue under a variety of circumstances, if not concerning life or death, at least *health and safety*. This is precisely the case in the present instance. By such impositions suffering humanity is not only deprived of the benefits that might in the meantime have been derived from the genuine medicine, but from their deleterious nature *positive injury is inflicted* where relief should otherwise have been afforded. Now such a dangerous deception calls loudly for professional interference; and in putting the public on

their guard against these fraudulent designs, the author feels as legitimately employed, in a sanitary sense, as if he were warning them of a plague, or making known some prophylactic against an approaching epidemic.

However, a crusade against quackery does not constitute the leading feature of this work, although it forms a part of the subject under consideration. Still, from a sense of justice as well as humanity, the name of a remedial agent, *highly valuable in itself*, ought no longer to be suffered to be bandied about, and made a mere *bait* by the rapacious empiric, for the purpose of imposing upon the uninitiated a base *nostrum*. By *analysis*, as already shown, these spurious compounds, though so *showily* set forth as "Sarsaparilla," are found to have not the shadow of a claim to the character or title of that remedy; indeed, from their *deleterious nature and effects*, were we to admit them as such, it would be apt to create a very bad opinion of the *genuine* medicine, and rather calculated to bring it into *undeserved disrepute*.

The true purport then of these pages is, to explain the proper uses and employment of the *legitimate* forms of sarsaparilla; and there can be no question, from the frequent and extensive prescribing of this medicine, it must be of paramount importance to the public, more especially those in need of it, to know something more of its nature and effects than they do at present, and how to insure its success as a remedy in those cases wherein it is advised or indicated. Though hitherto people have been left to chance in such matters, the information here offered cannot prove otherwise than useful

to some hundreds in search of health, indeed we may say to thousands, at this moment seeking the benefits to be derived from its use, and the salutary change that may be brought about in the system in a multitude of complaints, wherein the employment of a *good* form of sarsaparilla frequently constitutes the chief means of cure.

The explanations herein given on the therapeutical uses of the remedy, it must be understood, are by no means intended to enable persons to undertake the cure of their own complaints, nor, where the circumstances of the case require it, to dispense with the advice and assistance of their medical attendant. The author rather affords such information with the view of furthering the ends of both patient and physician, that the former may have the full benefit of such assistance, and co-operate with the latter in rendering the remedy, in those cases wherein it is prescribed, *the more effectual.*

For the convenience of those who may not wish to wade through the work, or devote their attention to it as a whole, the subject will be found divided under different heads, as *history, botany,* the *several kinds,* its *medicinal properties, various preparations, forms, doses,* and *the diseases employed in;* to either of which, by reference to the contents, they can at once turn without further trouble, and obtain that amount of information they more immediately require.

In conclusion, the author trusts that, in calling the attention of the profession, the public, *and he hopes the press,* to the contents of this little manual on so useful a medicine, its *necessity* and *utility* may not be lost sight of, but thereby

take a still wider range, and that his labours (in this age of sanitary progress) may be regarded with as much interest as any other measure touching the health of her majesty's subjects and the well-being of the community at large.

In substituting for his own name the subjoined title, he has no other motive than avoiding the imputation often cast on authors of popular medical works, namely, of having no other end in view than puffing themselves into notoriety, and inducing their readers to consult them; the writer's sole motive, as already shown, is *simply to supply the wants of those for whom the work is more especially designed;* and hence he trusts his services (though *incognito*) may prove equally acceptable, as well as somewhat useful in rendering this popular medicine, in multitudinous instances, the more successful.

LINNÆUS SMILAX.

London, 1854.

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ON

SARSAPARILLA.

HISTORY OF SARSAPARILLA.

Sarsaparilla, or, according to the Pharmacopœia, *sarza*, is the root of certain species of *smilax*, a class of medicinal plants found growing in many parts of South America. The name is derived from the Spanish *zarzaparilla*, or *çarçaparilla*, the original name of the European rough bindweed (*smilax aspera*), to which the South American plant appeared to have some resemblance.

In tracing the history of this drug, we find it by no means a new medicine; indeed, our acquaintance with its character and uses as a remedial agent may be dated from the days of Columbus and the discovery of America; for his followers found it in common use among the natives of the New World, both as a beverage and a medicine. It was first brought to Europe by the Spaniards, about the year 1530, with the character of being a *depurative* of great power, and a medicine of singular efficacy in cleansing the body of its morbid and corrupt humours, sweetening the blood (so-termed), and removing "divers diseases wherein there was a chance of cure by sweating." Its extraordinary success in many malignant forms of disease, and the remarkable cures it effected, soon attracted the attention of the most eminent medical men and

botanists of the day, who in their turn made its remedial virtues still further known, until at length its fame spread throughout the civilized world.

Monardes, a celebrated botanist and physician of Seville, in his book "On the Singular Vertues of Divers Herbs and Roots of the New-found World," seems to have been the first to make mention of it. In a quaint translation of the time (1545) he tells us, "It is twenty years since the *zarçaparilla*, and the use thereof, came to this cittie; it first came from the New Spaine. The Indians did both use it as a drinke and a medicine, with which they did heale divers and manye diseases. We use it as the Indians did, who taught it to our Spaniards; and so greate is its use at this day, that it is applied to almost anye disease; it healeth old sores, resolveth all swellings, cleanseth the body, and gives a good colour to the face; taketh away melancholie, the paynes of the goute, and agues long and sharp, as quotidians; all of which it doeth by provoking sweat, and in this it doeth exceed all other medicines. I have found greate effectes from it in large and importunate diseases, in which the common remedies of phisicke have not profited."

Gerarde, in his "Historie of Plants," 1597, in regard to this medicine remarks, "That the *zarzaparilla* of Peru is the root of a plant brought unto us from the countries of the new world called America; and such things brought from thence, although they seeme like to those that grow in Europe, doe notwithstanding differ *in vertue and operation*. So with this *zarzaparilla*, which took its name from the likenesse to the rough bindweed (*smilax aspera Lusitanica*), but by the nature of the climate and soil is of greater power and value than that which groweth in Portugal or Spaine. It is a great remedie against long-continued paines of the joints and cold diseases," (meaning chronic rheumatism, ague, &c.) "and

all manner of infirmities where there is hope of cure by sweating; *it is a medicine whose vertues are well-known to all.*"

From these remote dates down to the present day, sarsaparilla has continued to rank among European remedies as a medicine of remarkable value in a multitude of complaints that appear to yield to nothing else; though occasionally, from causes we can easily account for, its use has been attended with variable success, and sometimes doubtful reputation; indeed, disappointments from defects like these have called forth more discussion, and given rise to a greater discrepancy of opinion upon the merits of this medicine, than of any other drug or chemical within the whole range of the materia medica. Notwithstanding this, it has always held a prominent position in our Pharmacopœia; and, as a highly useful remedy, not unfrequently plays a distinguished part in the treatment of numerous forms of disease, where other means fail and the ordinary remedial agents seem unavailable. Indeed, when *from a root of good quality, and well prepared,* so invariably successful has it been found in changing the corrupt and vitiated humours of the body, altering and amending the secretions, correcting depraved chylification, and bringing about a better state of *digestion, assimilation,* and *nutrition,* that it may be said to be a remedy of its class *without an equal;* and, considering it effects these ends (unlike most other medicines) without the slightest sensible inconvenience to the animal economy, one of the most *simple, safe,* and *effectual* alterative agents we possess.

But notwithstanding its curative influence (both alone and in conjunction with other means) in so many phases of disease, and its salutary influence on the secretions and the system generally, it appears *till very lately* many of the claims of this invaluable medicine had been lost sight of. In short, the vain discussions of the sceptical regarding its failure as a *specific*

in one form of disease, and the difficulty of explaining its *modus operandi* in others, or upon what CHEMICAL principle it depended, have attracted far more attention than the claims of the remedy itself, or the maladies it might (under proper circumstances) prove of service in. Added to this, unfortunately, there has been hitherto a predisposition on the part of the faculty for remedies of the chemical or chemico-mineral class in preference to the productions of the botanical world. This *exclusiveness* in medicine is much to be lamented, as there can be no doubt it causes a vast number of very useful remedies to be much neglected, and among these may be mentioned sarsaparilla.

But hitherto the greatest drawback to the more general adoption of this depurative, seems the limited notion of its use in *particular forms of disease only*, simply owing to its first introduction into Europe as a remedy in syphilitic complaints, a *début* of all others the most calculated to prevent any further inquiries as to its merits, however beneficial its alterative properties might prove in other respects, as they unquestionably have proved in *cachectic* disorders, as scrofula, cutaneous affections, chronic rheumatism, malignant ulcerations, and many other complaints in which it has been found so highly serviceable. In relation to these false notions and restrictions of the use of sarsaparilla, Dr. Hancock, who has given us much information on the subject, and whose dictum is of some weight, justly observes, " One of the most foolish errors into which many of the faculty as well as the public have fallen with regard to this medicine, is that of circumscribing its use to *one* class of complaints—why, when applicable to so many, seems difficult to account for, without it can be traced to its first introduction as an anti-syphilitic *some three centuries ago;* from which period so little progress, it appears, has been made in properly explaining its properties, or extending its uses.

But, convinced of the great efficacy of this medicine, *when genuine*, and prepared by an unobjectionable method, I do not confine its use within so limited a circle; I would equally insist on its claims as a remedial agent in a large multitude of disorders, in which it is daily being discovered to be of the greatest advantage." (1)

However, independent of these misconceived notions, and though some few there may be who are sceptical as to the amount of good to be derived from sarsaparilla, the majority of physicians and surgeons, British and Continental, are decidedly in its favour; indeed, there are few practical men of the present day of any eminence who do not daily prescribe it, and at the same time attribute much efficacy to a good form of this medicine in a multitude of complaints wherein depurative or alterative remedies are indicated. From the success that has of late years attended the exhibition of some of its best forms in many obstinate cases of *cachectic* and *chronic* disease, there at length appears less doubt about the merits of sarsaparilla as a medicine, than the quality of the root, mode of preparing it, &c. Upon such desiderata the character of the remedy really depends; and when virtually carried out, no medicine is found more capable of furnishing evidence of its utility; but too often some inferior article, or faulty mode of treating it, and not unfrequently the substitution of some *base imitation*, gives rise to doubt and disappointment, whereby the legitimate and genuine forms of this medicine are brought into disrepute, and, without inquiry into the cause of failure, laid aside, perhaps to give place to something of far less value, frequently for mere *fashion* sake. (2) But even failure

(1) "Transactions of the Medico-Botanical Society."

(2) Dr. Paris observes, "There exists a fashion in medicine, as in other affairs of life, regulated by the caprice and supported by the authority of a few leading practitioners, which has been frequently the occasion

does not always warrant us in depriving a remedy of that just reputation to which under proper circumstances it would have been entitled.

The enormous consumption of this drug (which appears almost as prodigious as the quantity produced) goes far to prove it has something more than ordinary claims to the character it has attained. A remedy can be of no mean order that has managed to retain its reputation *upwards of three centuries*, its consumption annually increasing, particularly within the last few years, during which it has been in greater repute than at any previous period. To give some idea of this, in Great Britain alone upwards of 100,000 lbs. are consumed annually. One of our large London hospitals has been known to expend as much as £1500 for a single year's consumption. In the worn-out or debilitated systems so common to many who present themselves at these establishments, its great utility is daily manifested, by the most lean and emaciated patients rapidly regaining flesh and strength under its use. It is prepared or dispensed, in some shape or other, in every chemist's and apothecary's shop, surgery, and hospital in the three kingdoms, and in many private families for domestic use. From time to time it has constituted the chief ingredient of several celebrated remedies, as the *Decoctum Lusitanicum*, or Lisbon diet drink, the qualities of which have been the subject of so much encomium; while numerous empirical preparations have depended upon sarsaparilla as their sheet anchor of success. It forms the basis of the Balm of Gilead, or Balsam of Mecca, and of the Jesuits' Drops; in America, of Swaine's Panacea, said to have effected the most wonderful cures, espe-

of dismissing from practice valuable medicines, and of substituting others less certain in their effects, and more questionable in their nature."—*Pharmacologia*.

cially in scrofulous diseases; and in France, of the famous *Rob* of Laffecteur, and the *Sirop de Cuisinier*. Besides the enormous quantities imported into this country, its consumption on the continent is equally large. In South America, the country of its growth, as well as a medicine, it is prepared and used as a *common beverage;* and from its well-known *alterative* properties (being popularly termed "a purifier of the blood") seems equally sought after in every part of the civilized globe.

With the nature and properties of a remedy of such extensive utility and increasing popularity, we can hardly be too conversant, if only to *avoid imposition*. Although we have the highest authority in support of the efficacy of its best forms, we are liable to be misled or imposed upon by deleterious nostrums disguised in its name.(3) Even with the *genuine* so much depends upon the drug itself, its species, growth, quality, age, &c., together with the methods employed in procuring its pharmaceutical product, that inattention under either of these heads may deprive the remedy of the better part of those principles on which we depend for success. In short, to insure its advantages, sarsaparilla is a medicine which requires particular care in regard to the preparation we make choice of. Hitherto, we may say, it has been almost prescribed at *random*, little being mentioned beyond the mere name—an oversight that has often led to disappointment as well as imposition; but where such a curative agent is called for, both the physician and his patient will render it a far more efficient one by selecting, in the first instance, some well-prepared and approved form.

(3) At the present time the public cannot too strictly guard against the spurious nostrums now sold, at certain *showily fitted-up shops* in the metropolis, under the assumed title of Sarsaparilla, not an atom of which really enters into the composition of these deleterious compounds. This plausible piece of quackery will be more fully detailed under a future head.

BOTANY OF SARSAPARILLA.

Sarsaparilla, as already observed, is the root of certain species of *smilax*[1] found growing in South America. They form a kind of evergreen shrub, sometimes climbing to a great height, and by means of long tendrils attaching themselves to the branches and stems of trees.

The following constitute the chief botanical characters of the finest species of medicinal smilax, or the true Sarsaparilla plant, an elaborate figure of which, drawn from nature, forms the frontispiece of this work.

Stem.—Twining, shrubby, and prickly, somewhat like a bramble; long and slender; round or angular, and more or less armed with spines, according to the stage of growth. The young shoots green, the older ones woody; twisted or contorted, with a tendency to climb, partaking much of the character of the vine, as a part of its name implies.[2]

Leaves.—Oval-oblong or heart-shaped, smooth and shining; on the upper surface of a deep green, beneath of a much paler hue; varying in length and breadth from five or six inches to a foot long, and about two-thirds as broad; bearing tendrils above the base, and having from three to five longitudinal veins running from their base to the more pointed extremity.

(1) Smilax, from the Greek Σμιλαξ, is the systematic name of a genus of plants belonging to the class and order *diœcia hexandria* of the Linnæan system, and to the natural order *Smilaceæ*. The several species of this extensive genus are found inhabiting the tropical regions of Asia, Africa, and America, and from thence extending southward to New Holland, and northward to Japan, North America, and the South of Europe.

(2) Most species of smilax are provided with spines; from which has originated the first half of the name in the Spanish language—*zarza* (a bramble), and, from its climbing habit, *parilla* (a vine).

Flowers.—Issuing from the wings of the stalk, formed in round bunches, generally of a pale straw colour, though sometimes mixed with red; they are in time succeeded by a red fruit or berry, about the size of a small cherry, and containing two or three globular seeds.

Root.—Knotty, tuberous, growing obliquely in the ground; composed of many thick fleshy fibres; from the upper part of which spring the young slender shoots and aerial stems, and from beneath the suckers and numerous divergent fibres, from three to four feet in length, running just below the surface of the ground, forming the sarsaparilla. Externally brown, internally white, with a woody centre; usually about the thickness of a quill, but varying both in size and colour, from a light brown to a deep red, according to the locality of the country, and quality of the soil in which it vegetates.

The foregoing features, with few exceptions, constitute the chief characteristics of the *medicinal* species from which we should *properly* obtain the supplies of the officinal article so long known as occupying a place in our materia medica. The plant, and also the product, more or less differ in appearance as well as medicinal principle from the like causes that influence other productions of the vegetable kingdom. Some have assumed these variations in growth and structure to constitute botanical distinctions; while others classify the same under *local* names, derived from the country in which the specimen was found growing. Hence we read of medicinal smilax under different heads, as *smilax officinalis, Braziliensis, Peruviana, Paraguensis*, &c.

The plant is indigenous to most parts of tropical America, and is usually met with in low marshy spots, by the margin of the mighty rivers of that country intersecting Colombia, Brazil, and other parts, and in the vast forests of the interior watered by their tributary streams; in New Granada, on the

banks of the Magdalena, and by the shores of the Cassiquiare; in Brazil, on the Ucayali, the Ica, Jaura, Madeira, Rio Negro, and other branches of the Amazon; in some provinces of the Rio de la Plata; and the more choice growths in the rich soil of the Parana and Paraguay.

Although many species of *smilax* are supposed to yield sarsaparilla, a very small proportion of them really possess any *medicinal* value; and these few more particularly belong to the tropical regions of South America. But notwithstanding, from its great demand and consequent high price, the inhabitants of many other parts gather it from a variety of indifferent and *doubtful* species, the roots of which have any resemblance to the genuine drug, and frequently from plants in no way allied to sarsaparilla.(3) Hence, when we come to reflect that many of these spurious kinds find their way into the European market under the name of sarsaparilla, it may in some way account for the diversity of opinion with regard to the claims of this medicine: from its various descriptions and qualities—some *medicinal*, others *inert*—widely different results must have very naturally arisen.(4)

There has been considerable difficulty in coming to a correct conclusion as to the precise species furnishing the several

(3) "Till a very recent period," observes Dr. Hancock, "the people of Essequibo mistook for sarza the pendent fibres (not roots) of a species of *arum;* and, in the belief that it was the genuine drug, it was collected and sold as such. Hence we cannot be surprised to find the European market abounding with *false sarsaparilla.*"

(4) Dr. Ryan mentions the case of a gentleman who purchased 14 lbs of what was sold as sarsaparilla; from which he made a decoction. and took the whole, without experiencing the slightest benefit; when, some time after, a pound of the genuine root restored him to perfect health. I have seen the same effects from a *single* bottle of a good form of the medicine, after inferior preparations had been continued for weeks in vain.

commercial varieties of sarsaparilla, in consequence of our insufficient acquaintance with the exact localities and origin of each particular kind, arising from the fact, that the sarsaparilla imported into Europe seldom (except by private hands) comes *direct* from the place of growth.(5)

But although many assume sarsaparilla to be the produce of numerous species of smilax, there is still a doubt if even the few mentioned really *all* afford roots possessing those medicinal qualities that characterize the officinal article. Many are of opinion, that but *one* species only can be truly said to furnish the genuine drug.(6) Travellers, botanists, and medical practitioners in that part of the world wherein these species are found growing, as well as the natives who collect the root, share in the same belief, and place little reliance on the rest. Even the product of the true species widely differs in medicinal value, while at the same time the plant itself varies considerably in growth and structure, according to the latitude or locality it inhabits; in fact, so materially is it influenced by these circumstances, and altered for better or worse by the soil, situation, &c. in which it is found, that many of our systematic botanists have been led to divide specimens of the *same plant* in its different stages of growth or perfection into so many *distinct species*. The same holds good with regard

(5) This may be easily accounted for. Sarsaparilla being an article of barter in South America, it is frequently, by way of payment for other goods, conveyed from place to place, and again, by the traders who frequent those shores, shipped from port to port, until its precise botanical origin or place of growth can only be guessed at.

(6) "Of the six or eight species of smilax I saw," says Dr. Hancock, "I never found but *one* to manifest to the taste the sensible qualities of the genuine medicinal sarza; the rest being for the most part perfectly insipid in the mouth and fauces, and, as far as my experience goes, I should say, nearly *inert* as remedies."

to the root, that of the precisely same species affording far finer specimens, and exhibiting the sensible qualities of the drug in a much greater degree in some localities than it does in others. But in regard to the greater number of species, there is evidently a wide distinction in reference to their *medicinal* claims; the majority, in fact, possess no properties whatever appertaining to sarsaparilla, while many of those presumed to furnish the drug, from their somewhat nearer approach to the true plant, seem still doubtful, and for the most part prove nearly inert as remedies. However, there are some distinctions by which we may endeavour to separate the true species from the rest, and divide the medicinal from the non-medicinal kinds.

The several species of smilax assumed to yield sarsaparilla are botanically distinguished by certain peculiarities in their leaves and stems. The stems of most species are somewhat similar, partaking of the character of the bramble, and being armed with thorns; but there is a marked difference with regard to their leaves, which may be divided into—1. *Oval-oblong, cordate, or heart-shaped species;* 2. *Long lanceolate-leaved species;* 3. *Lingual;* 4. *Ivy-leaved;* 5. *Long ear-leaved species.* The first-mentioned more particularly marks out the medicinal species from the rest. The plant may vary in many unimportant respects, influenced by the circumstances already noticed; the stems may be more or less beset with spines, round or angular, or the leaves differ in size, length, and breadth; but the *oval-oblong leaf* always strikingly distinguishes the true sarsaparilla plant from the long ear-leaved and other non-medicinal species, from which, notwithstanding, a large portion of the inferior qualities forwarded to this country appear to be collected.

The following have been described by different authors as the sources from which the several sorts of sarsaparilla

are chiefly obtained: in some instances they may constitute distinct species; in others, in all probability, they are but different growths of the same.

Smilax Officinalis.—Stem twining, shrubby, quadrangular, smooth, and prickly; leaves oval-oblong, about a foot in length, and from four to five inches broad. Found by Humboldt and Bompland growing in New Granada, on the banks of the Magdalena, in Colombia, where by the natives it is called *zarzaparilla.* This sometimes furnishes the *so-called* Jamaica Sarsaparilla; but many kinds pass under this name.

Smilax Medica.—Stem angular, armed with straight spines at the joints; oval pointed leaves, six inches long, bearing umbels of flowers, succeeded by small crimson berries. Found by Scheide growing on the eastern slopes of the Mexican Andes. Supplies the Vera Cruz variety.

Smilax Syphilitica.—Stem rather more cylindrical and prickly, oval-oblong pointed leaves, a foot in length, similar to smilax officinalis. Collected on the Cassiquiare, and at Maynas, in Colombia, By some supposed to be a distinct species. Supplies Brazilian Sarsaparilla.

Smilax Papyracea, Braziliensis, Paraguensis, &c.—Stem long and tapering, round or angular, and more or less beset with spines, according to the stage of growth; leaves oval-oblong, smooth and shining, varying in length and breadth from five or six inches to a foot in length, bearing tendrils at the base, and having five longitudinal ribs, terminating at their pointed extremity. This is the species mentioned by Martius as found near the Rio-Negro branch of the Amazon, and alluded to by Dr. Hancock as the only one furnishing the genuine root. It is the one whose product is most prized by the colonial Spaniards, and forms the *salsaparilla* and *zarza.* It grows in many parts of South America, and is the source of most of the red sarsaparillas, the best Brazilian sorts, and also of the

produce of the Parana and Paraguay (*smilax Paraguensis.*) [*The Figure is from a specimen.*]

Besides these there are said to be some other species, as *smilax cordato-ovata* (Persoon), *smilax obliquata* (Poiret), *smilax Purhampy* (Ruiz), and *smilax Cumanensis* (the *azocorito* of the natives of Cumana, a city of Venezuela.) Cumana and the Caracas supply much of the sarsaparilla we receive from the Spanish main.

Many of these without doubt are identical, and may frequently afford roots of similar appearance as well as properties; their gradations in growth and amount of medicinal principle being dependent upon natural causes already assigned, the degree of latitude in which the plant is found, and the consequent variation of climate, likewise elevation of the country, amount of moisture, heat, &c., and more especially the earthy elements constituting the soil in which the plant is found.(7)

The best sarsaparillas are all of Colombian, Brazilian, Peruvian, or Paraguan growth, with which the Central American and Mexican kinds bear no comparison, being for the most part from a different species. The finer sorts are usually found growing in a rich red loam, and these have their sensible properties more marked than any other, and also preserve certain peculiarities of structure, colour, taste, and odour (especially upon burning), that strikingly distinguish them from inferior kinds.

(7) The powerful influence of soil upon such productions and the medicinal activity of their pharmaceutical products is well known to the medico-botanical enquirer. Plants possessing an odoriferous principle in a *rich soil*, part with it in a *sandy one*. And somewhat similar results arise from situation; the same plant found growing in one locality has proved *narcotic*, in another *cathartic*, and in a third *inert*. A species of mushroom (*agaricus piperatus*), eaten in Prussia and Russia, proves poisonous in France.

COMMERCIAL VARIETIES.

Commercially, the several descriptions of sarsaparilla seem known, partly by their appearance, mode of packing, form of bundles, &c., but more particularly by the name of the port from whence they are shipped for this country, as *Jamaica*, *Honduras*, *Lima*, *Lisbon*, and so forth; but this in nowise indicates the place of growth, or correctly informs us from what source the product was obtained. Hence many varieties of the root find their way into the market under the same name; the inferior are frequently substituted for the better sorts, and sometimes roots which have no claim whatever to the name of sarsaparilla.(1)

Jamaica Sarsaparilla (*so termed*) does not grow in Jamaica; but that island being the principal entrepôt for the produce of the South-American continent and Spanish main, almost every description of this drug, good or bad, finds its way at various times into the Jamaica market, not unfrequently being taken in exchange for the manufactured goods of the mother country. It may be the growth of Mexico, Colombia, Guiana, or Brazil, and the product of more than one species; consequently the name is no criterion. Much of the *so termed* Jamaica Sarsaparilla comes from the *Mosquito Coast;* other

(1) Articles under the name of this drug are imported from a number of places having nothing whatever to do with the genuine production; from the East Indies we have *hemidesmus;* from Italy and Germany, *smilax aspera;* and from the United States, the common herb *aralia nudicaulis*, all entered under the general head of Sarsaparilla.

qualities from *Costa Rica*, the *Caraccas*, *Santa Martha*, and *Carthagena* (the port of the Magdalena): the latter is believed to be the product of "*smilax officinalis.*" But they all more or less differ in colour and appearance as well as properties; many of the finer sorts of sarsaparilla, that formerly came by way of this port, though called "*Red Jamaica,*" in reality belonged to the Brazilian variety.(2)

Honduras Sarsaparilla.—This is the ordinary sarsaparilla of commerce; it is usually seen in bundles about two feet long, weighing about a couple of pounds; sometimes of a light hay colour, and at others of a dirty greyish brown. It is nearly all fibre, but few sticks, and those very poor. Upon opening a bundle it is frequently found to contain stems of doubtful species, and a considerable quantity of dust and dry mould; it has the least firmness of any, and is the most mealy; possesses no odour, and very little taste; nor does it tinge the saliva upon mastication, like most of the better sorts of sarsaparilla. Upon decoction, it does not yield either the *deep red* or peculiar aroma of the Colombian and Brazilian varieties; nor can it be compared to these either in commercial or medicinal value. It is brought from the Bay of Honduras, in bales weighing from 100 to 150 pounds. It is the produce of Southern Mexico and the states of *Guatemala.* It is the cheapest and most common in the market, the growth of *smilax medica.*(3)

(2) The finer growths of South-American sarsaparilla have a reddish tint, varying from a cinnamon colour to a deep red brown; and hence the old *red* sarsaparillas. Those who remember them must confess, the dirty grey bundles we now see in the druggists' windows show a considerable falling off, of late years, in the quality of this drug. It may be accounted for by the Honduras and Mexican sorts being so much cheaper, and consequently more *remunerative.*

(3) Guatemala more especially furnishes the light-coloured mealy sorts, termed by the dealers "*Gouty Sarsaparilla.*"

Vera Cruz Sarsaparilla.—The *true* Vera Cruz comes from the port its name implies; it is the best Mexican variety. It is darker coloured, more firm, and less mealy than the Honduras, and gives a deeper colour on decoction. It is usually in bundles (unfolded) about two feet long, with the chump at one end. It is the same as Tampico sarsaparilla. Both are the produce of *smilax medica*, found growing on the eastern slopes of the Mexican mountains. Humboldt states that nearly 5000 quintals are annually exported from Vera Cruz. However, it is not as common in the market as the Honduras.

Lima Sarsaparilla includes the several kinds collected on the west coast of South America. The best sorts of Lima sarsaparilla come round Cape Horn from Callao, Conception, Valparaiso, and other ports; frequently under this name are included some of the very finest growths of medicinal smilax and red sarsaparilla, as the product of smilax Peruviana, Paraguensis, &c. The latter occasionally finds its way into Chili, with other produce of Paraguay, brought across the Pampas to Santiago, from Santa Fé, on the Parana. Other qualities of Lima sarza come from Guayaquil (the produce of Maynas), and occasionally from Costa Rica. Many of these are met with in the Jamaica market, and furnish the more choice kinds. According to country and growth, the cortex varies from a clay colour to a deep reddish brown.

Lisbon Sarsaparilla.[4]—So named from being first brought to Lisbon from the Portuguese possessions, from whence it was formerly imported into Great Britain; but it now comes direct from the Brazils, and hence its proper name of Brazilian sarza. It has always been esteemed one of the best, and commanded the highest price in the market. It includes

(4) There is at present a very inferior article in the market under the name of Lisbon Sarsaparilla, from quite a different source.

several growths and qualities. Packed in various ways, it is sometimes met with, folded, in the ordinary hanks of other sarsaparilla; likewise in long cylindrical bundles, closely bound, and cut off at the ends; and occasionally, when unfolded, packed in small serons or skins. It looks cleaner, has larger sticks, is less fibrous, and more free from dust and rubbish, than the ordinary kinds. The colour varies from a dark brown to a deep red, according to growth, mode of collecting, drying, &c., which materially alters the different kinds (some being smoked, others sun-dried.) Collected on the southern branches of the Amazon intersecting Brazil (the Madeira, Jaura, Topayos, and other tributaries), the best appears to be the product of *smilax Braziliensis* and *Papyracea*, imported from Para Maranham and Bahia.

Rio-Negro Sarsaparilla.—This also belongs to the Brazilian variety, collected in the woods of Guiana; on the Essequibo, Rio Imiquen, and the Cassiquiare, in New Granada; and on the Iea, Yapura, and Rio Negro, in Brazil; from which last it derives its name. It differs in appearance rather from other Brazilian sorts, having lost its natural colour from being dried over fires, and sometimes smoked, which makes it darker. It is believed to be the produce of both *smilax officinalis* and *papyracea* — if these really comprise two distinct species, in lieu of (what appears not improbable) but a different stage of growth of the same plant. Some kinds are considered very choice. It is known in the Spanish colonies by the name of the *Zarza del Rio Negro*.(5)

The best Brazilian sarsaparillas are now scarce in the English market; they more frequently find their way into

(5) Dr. Hancock's botanical description of the plant yielding the sarza of the Rio Negro appears to correspond with "the true oval-oblong-leaved medicinal smilax." He considers it the finest of the six or eight species he found growing there, and that it furnishes the best sarsaparilla.

Spain, Portugal, and Holland; hence it is not uncommon to meet with fine specimens of this drug on the continent. The Mexican and Central-American sorts, *viâ* the West Indies, now furnish (with few exceptions) the greater part of the sarsaparilla consumed in this country, though commercially described as Honduras, Lisbon, Jamaica, &c. That which comes by way of the United States has been expressly imported by the Americans from Vera Cruz, Honduras, and the West Indies, for the purpose of being mixed and adulterated with other roots, and as a cover to the spurious kinds possessing no medicinal properties whatever; it is then repacked, again made up into bales, and exported to Great Britain.

Paraguay Sarsaparilla (*Smilax Paraguensis.*)—This is the produce of that part of the South American continent from which it derives its name; but, from our limited intercourse with that country, together with the trouble and expense of procuring it, it appears it cannot at present be obtained in sufficient quantity to become an article of general commerce.

It is found growing at many places on the Parana, but more particularly on the Paraguay, and its tributary streams, the Yapané, Pileomay, and Rio Vermejoo, or Red River, so named, it is said, from the water laving its shores or overflowing its richly wooded banks being impregnated with both the colour and properties of the sarsaparilla.(6) In these parts the plant appears to reach the greatest state of perfection, frequently climbing the tallest trees, mingling with endless other species, creepers,

(6) That some of the rivers of South America do partake of the properties of this medicine and many other drugs growing in such dense masses along the shores, is well known to those who have sojourned in these regions. Robertson, in his Travels, observes, "I rode into Corrientes at noon; the town is beautifully situated at the confluence of the rivers Parana and Paraguay, which are both at this place magnificent. . . .

and medicinal plants, herbs, and roots, with which the woods abound. It is the only one selected by the natives as furnishing the genuine drug, or the roots of which they take the trouble to collect. It is used both as a medicine and a beverage, being digested with wine, brandy, and other spirituous menstruum, or strong decoctions of it, sweetened with liquorice, sugar, &c., worked in the sun's rays until vinous fermentation ensues, when with other additions it forms an agreeable drink.

This is generally considered the most choice description of sarza in South America, and, whenever it can be had, commands a much higher price than the ordinary Brazilian sorts. Its superiority over other products of the same species (*smilax papyracea*) depends not only upon its finer growth, and the rich red soil in which it is usually found, but also in a great measure upon the *better mode of collecting and preparing it for medicinal use.* The Payaguá Indians and Peons, who are in the habit of collecting the *yerba* (7) and different *medicinal* products

The former, after dashing and foaming over the great waterfall (Salto Grande), here resumes its placid course; and, richly wooded on both sides, pours down its *salubrious waters impregnated with sarsaparilla,* and forms its junction with the Paraguay." Monardes makes mention of the natives of Peru bathing in a river impregnated with the properties of the drug, and drinking of the same, "*by which they were healed.*" A similar circumstance is said to have led to the discovery of the virtues of the Peruvian bark. An Indian ill of a fever, to quench his thirst, drank at a pool impregnated with the properties of the bark, simply from some trees having fallen therein; through which he rapidly recovered.

(7) *Yerba.*—The Paraguay tea, which is said not only to greatly resemble the Chinese production, but even in many respects to surpass it. It is universally used in South America as the morning and evening beverage. When made, it is termed *maté,* and affords a far more delicious infusion than Pekoe, Souchong, or Bohea.

of Paragnay, (8) apparently pay more attention to these matters than the natives of the neighbouring countries. Selecting the finer plants *only*, they gather the root at a *particular season of the year*, and perfect stage of growth, when it is found to possess a kind of *bloom* upon the cortex or bark, peculiar to the finer sorts of sarza found growing in these parts. The method of collecting it appears to be simply by loosening the surrounding soil, and as it runs superficially below the surface, by means of a hook drawing forth the long slender fibres furnishing the sarsaparilla; it is then hung over ropes, and dried in the sun (in lieu of over *fires*, as adopted in many parts of Colombia, Brazil, &c.), by which both the tint and odour of the drug are preserved. When dry it is cut into convenient lengths, from two to three feet long, and formed into long bundles, or packed closely in serons or hides, which frequently, if damp, are found dyed with the colour of the root.

In appearance this sarsaparilla approaches to the better sort of red Brazilian, found growing in the interior, but is of a deeper tint, owing to the better mode of collecting, drying, &c.; it is also rather larger. Split longitudinally, it presents a whitish centre, and is less mealy and more compact than the

(8) In regard to its *medicinal* productions, the soil of Paraguay may be said to be the most prolific of the whole South-American continent. This was long since discovered by the Jesuits who settled in that country, and who, possessing more medico-botanical knowledge than men in general in that day, soon turned it to account. Medicinal plants out of number are found growing wild and in the greatest abundance in most parts, not only sarsaparilla, but the red bark (Cinchona tree), rhubarb, vanilla, and various odoriferous gums, balsams, seeds, &c.—in short, a host of herbs, roots, and drugs, yet destined to enrich our *materia medica*, and increase the means whereby we combat disease. . . . Among other remarkable medicinal plants, may be mentioned the *palo de vivora*, or serpent's tree, the rind of which contains a powerful juice found by the natives to be an *infallible* cure for the poisonous bite of these dreaded reptiles.

ordinary kinds. Upon mastication, it strongly tinges the saliva, and leaves a slightly aromatic bitter taste, succeeded by a sense of warmth about the throat and fauces. It yields a deep-coloured decoction, which upon evaporation, owing to its greater freedom from fecula, gives a beautifully bright fluid extract. A piece of the root ignited emits an agreeable fume, slightly resembling cascarilla, which I have found to be one of the best tests of good sarsaparilla. None of the inferior kinds, or those that have been long exposed to the weather, give off this aroma.(9)

Paraguay sarsaparilla is not an article of general export from that country. Notwithstanding this, it occasionally finds its way with other produce or merchandize, brought from Assumption or Neembuca to Buenos Ayres. Some has been forwarded in a similar manner from Santa Fé, on the Parana, the port of transit for Chili and Peru. Probably, in course of time, it may become as common an article in the market as the ordinary kinds; but at present, notwithstanding the recent opening of the Parana, and our nearer commercial relations with this republic, although it may perhaps freely admit European manufacture, there still appears the same restrictions

(9) This aroma may be traced to the presence of an *essential oil*, and a certain odoriferous resinous principle pervading some sorts of sarsaparilla in a much more sensible degree than others. Doubtless such properties very much depend upon the root being gathered under favourable circumstances—as at a particular time of the year, proper stage of growth after flowering, &c. In short, the mode of collecting and *curing* it makes all the difference in the colour and appearance, as well as properties of sarsaparilla, as it does in many other medicinal substances. In some parts of South America it is dug up regardless of the season, carelessly collected together in heaps, and left exposed to the weather for weeks, and sometimes months, until it can be sold, or conveyed to a place of barter, by which time the better part of both its colour and virtues have been washed away.

as ever on the export of many of its natural products. The merchant, the traveller, and more especially the medico-botanical enquirer, will be looked upon as intruders yet for some time to come; and perhaps find, as hitherto, as much trouble and difficulty in getting into the country as there appears sometimes in getting out again.

SPURIOUS SARSAPARILLAS.

According to the law of botanical analogy, it is generally inferred, that plants coinciding in their exterior forms are closely allied in medicinal character. Linnæus, Jussieu, De Candolle, and others, were of opinion, that plants of the same genus had similar properties; those of the same order, neighbouring properties; and those of the same class, some analogous claims. But many exceptions to this rule may be found, even among species of the same genus; and so it happens in regard to *medicinal smilax*. No European species can really furnish the officinal drug, or afford an efficient substitute; even the true kinds fail when transplanted.(1) We have several *so called* sarsaparillas (some from known, others from unknown sources), and many herbs and roots in no way allied to this family have from time to time been put forth as substitutes;

(1) Many attempts have been made in the several botanical gardens on the continent; but no species of smilax can be cultivated in Europe capable of yielding sarsaparilla: the plant belongs exclusively to the *torrid zone*, and necessarily fails in a climate incompatible with its perfection. *Cultivation* appears to destroy the medicinal properties of this plant, even under the most favourable circumstances.

but experience has proved, that we seek in vain for the same effects from infusions or decoctions of these substances that we find in genuine sarsaparilla.

Italian Sarsaparilla.—*Smilax aspera*, the original species from which the tropical production is said to have first derived its name, is found growing in the south of Europe; but the root of this species has no resemblance to true sarsaparilla, nor does it possess any of its properties. In Italy, Spain, and other parts, where it is found in abundance, they never employ it for medicinal purposes, but import the genuine produce of the Spanish colonies.

English Sarsaparilla. — The young slender shoots and twigs of *tamus communis*, or black bryony, are sometimes collected and sold at many of the common herbalists' shops as a substitute for sarsaparilla; likewise the roots and stalks of *dulcamara*, or bitter sweet. Decoctions of the latter, for economy sake, are even given to patients as sarsaparilla in some of our hospitals.

German Sarsaparilla.—This consists of the root of several species of *carex*, or common sedge. It may be easily distinguished from the genuine by its warty appearance; it is commonly called "Bastard Sarsaparilla."

Chinese Sarsaparilla. — The stems and fibres of many spurious species of China root and wild brambles, that have any resemblance to sarsaparilla, for which they are collected and sold. The tubers of some species (*smilax China*) the Chinese eat, under the idea that it invigorates them. Chinese sarza is somewhat analogous to the young shoots of our bryony.

East Indian Sarsaparilla. (*Hemidesmus Indicus.*)—This is another substitute for sarsaparilla; it may be readily known from the true kind by its broken and contorted appearance; it does not split lengthwise like the genuine, but fractures trans-

versely. It has an agreeable flavour, but in a medicinal sense not the *slightest claim* to the character it assumes;(2) in fact, it is *inert*, and almost useless, save for the formation of a demulcent syrup, which sometimes serves as a vehicle for more active medicines.

There are several species of *smilax* found growing in India, but we have no authority to show that any of these are really *medicinal*, or afford roots possessing the same properties as sarsaparilla.

American Sarsaparilla.—A plant found growing in the hedges and swamps of the southern states; but, though termed smilax sarsaparilla, it does not furnish any of the officinal drug; nor is there in this or any other part of North America, any plant known to do so, although the twigs and roots of many are collected under the name of sarsaparilla, for the purpose of mixing with the *true* kind; which, as we have already had occasion to remark, the Americans expressly import for that purpose, having no *medicinal* species of their own. Dr. Wood, in the United States Dispensatory, observes, "If any root had been found to possess the same properties as sarsaparilla, it would have been dug up and brought into the market."

United States Sarsaparilla.—The chopped roots and stalks

(2) From the high price of the genuine root, many attempts have been made in our large hospitals to dispense with it, or find a cheaper substitute. *Hemidesmus* was one of these; but it proved valueless, and has very properly been rejected. Its introduction into the hospitals was owing to the following:—A gentleman named Watson (a few years since) imported a vast quantity of this so-called sarsaparilla from the East Indies; but, having no claim to that title, either in a commercial or medicinal sense, it soon became (in a double sense) a *drug* in the market. As a last resource, either to get it into repute or to get rid of it, he presented it, by way of a *liberal donation*, to various hospitals.

of *aralia nudicaulis*, a common herb collected in the marshes and swamps, and sold in America under the above name, and recently in this country; but it has not the most distant resemblance to the genuine article, nor is it in any way allied to it, having more the appearance of chopped straw, and, medicinally, about as much virtue. A decoction of this trash, together with other deleterious ingredients, constitutes the compound of that *monster quackery* that now disgraces our metropolis under the assumed name of Sarsaparilla; to which neither the herb, nor the nostrums made from it, have the slightest claim.

CHEMISTRY OF SARSAPARILLA.

Chemically, sarsaparilla consists of woody fibre,—variable proportions of starch, according to the quality of the root,—mucilage,—extractive,—a colouring matter,—an acrid bitter resinous substance,—an aromatic essential oil,—and a certain crystalline principle, named by the several scientific chemists who have successively investigated the subject, *salsaparine*, *paraglin*, *parallinic acid*, and *smilacine*, upon which the active properties of sarsaparilla are supposed to depend; but it is just as probable the bitter resinous substance and essential oil[1] are equally concerned in constituting the active elements of this drug. It is certain, the more any specimen of sarza exhibits these sensible qualities, the more efficacious are its preparations and compounds as a medicine. Smilacine, in

(1) The essential oil of sarsaparilla has the aromatic odour and taste of the drug itself; but it can only be obtained from the fresh and finer sorts. In the dry and older kinds it is either lost or converted into resin.

solution with water, when shaken, has the property of *frothing*, the same as a decoction or diluted form of the fluid extract of the best sorts of sarsaparilla; it is said to exert a sedative effect upon the system, succeeded by *diaphoresis*, and is supposed to possess all the medicinal properties manifested by the drug itself.

But chemical analysis can hardly be said to furnish any practical guidance in the choice of sarsaparilla. Besides, each account of its composition somewhat varies, and, beyond their *mere commercial names*, we have no precise information as to what kinds really were submitted to examination. Nor can chemical *tests*, as the action of *iodine* and other substances upon the *drug* or its *decoctions*, correctly determine its value; it merely proves the presence of *starch*, more or less common to most kinds, but does not indicate the amount of the *medicinal principle* upon which its activity depends. Some consider the *proportion of extract* yielded by a given quantity of the root a criterion of its excellence; but this does not always indicate the medicinal value of sarza, as some very inferior kinds furnish even a larger amount than the better sorts, but it is more tough and insoluble, owing to the greater quantity of *gluten* and *feculent matter*. We should rather take as a criterion those kinds giving a clear deep red decoction or infusion, which upon evaporation does not become *turbid*.(2) In many works on materia medica we read, that "*its virtues appear to reside in fecula.*" So far from agreeing with these erroneous opinions, I know of no property this substance possesses beyond *disturbing the stomach and inducing nausea.* Preparations the most free from these impurities not only

(2) A good extract, when diluted with water, will give a bright clear fluid, while the extracts of inferior sorts of sarsaparilla, rubbed down with water in a mortar, yield a dull *turbid* liquid.

prove more palatable to the patient, but are invariably found more effectual as remedies. That its properties as a medicine are perfectly independent of any amylaceous matter, appears evident from the superior efficacy of such forms of sarsaparilla, simply procured by medium of a *cold* aqueous alcoholic menstruum, by which the active properties of the root only are taken up, while its feculent and farinaceous substance is left behind.(3)

CHOICE OF SARSAPARILLA.

In the choice of this drug practical men pay little attention to chemical analysis or microscopical examination; they judge of sarsaparilla much in the same way they would of good Peruvian bark or Turkey rhubarb. As a general guide, we may take *colour, taste,* and *odour* as a pretty safe criterion as to quality.(1) Colour, doubtless, indicates the value of this

(3) In regard to fecula, Dr. Hancock observes, "It may probably contain a portion of nutritive matter; but I do not, with some, regard this as the source of its medicinal properties."

(1) The root of the finer species is covered by a brown, reddish-brown, or cinnamon-coloured *cortex;* and the more it inclines to the red, the richer, the better, and more powerful will be the product; the light hay-coloured is least in medicinal or commercial value. Monardes agrees with the darker-coloured *heavier* kinds being the best, and believes its virtues to reside in the rind or bark. He says, it should be fresh, which may be known by its not giving out any *dust*. . . . This dust does not always arise from mere *mealiness,* but frequently from age, decay, or being worm-eaten. Sarsaparilla sometimes has a *saltish* taste, owing to its having been saturated with sea water on the voyage; the smell of *creosote,* that it occasionally acquires, proceeds from its proximity to the ship's dressing, or being stowed away with tarred ropes.

drug, and with good reason, when we come to reflect how the *cortex* may be affected by the causes before mentioned, the mode of collecting, drying, &c. In this portion of the root the properties are supposed to reside, and hence the red-barked sorts (of the finer growths) are preferred; the light mealy kinds never give off the same *aroma* on decoction, nor afford an extract of as fine a flavour. In regard to taste, sarsaparilla has some very sensible properties,—a peculiar *sarza flavour*, well known by judges to pervade the finer sorts, while inferior kinds are comparatively *insipid;* an aromatic, mucilaginous, bitter taste, which at length communicates to the throat and fauces a certain acrimonious sensation, or slight degree of pungent heat, the same essential element that creates the *sensation of warmth in the stomach* usually experienced from its best preparations. Another criterion of good sarsaparilla is such as looks cleanest, gives out the least *dust* upon breaking, appears most compact and *weighty*, and splits easily its whole length. One of the best tests to which we can submit it appears to be *ignition:* by lighting a piece of the root over a flame, we may discover by the *fume* (when extinguished) whether or not it has parted with its essential principles. If fresh, genuine, and of fine growth, it will give off an *aroma* slightly resembling cascarilla; none of the inferior sorts, false kinds, or those whose virtues have been washed out by the weather, will afford this odour, which without doubt is one of the chief elements upon which the activity of the drug depends. These are the simple means, then, whereby we may discriminate the quality of the different sorts of sarsaparilla. And many whose business it is, in a *commercial* sense, to become well acquainted with such matters, both at home and abroad, put more faith in them than the more *hypothetical* rules laid down for their guidance by modern science.

PREPARATIONS OF SARSAPARILLA.

Sarsaparilla is prepared and administered in a variety of ways, as *decoction*, *infusion*, *pills*, *powder*, *syrup*, and the *solid* and *fluid extracts*. Previous to furnishing the formulæ of these, and pointing out the most eligible preparations, it may be as well to mention, for the information of the non-professional reader, that the curative powers of this remedy are considerably influenced both by the *form* in which it is given as well as by the *mode* of preparing it for use, and that inattention to the latter is as frequent a cause of failure as an inferior quality of the root. Even supposing the root to be good, its medicinal properties may be seriously deteriorated, if not wholly destroyed, by a careless method of treating it. By *long boiling* its aromatic and essential principles pass off in vapour, while at the same time its organic elements may undergo such important chemical changes that we leave behind a product comparatively worthless; indeed, decoction and evaporation (especially over a naked fire) appears a most prejudicial mode of procuring the active properties of a drug which depends upon the very volatile principle we by such means deprive it of. Every one acquainted with the ordinary way of preparing sarza by *coction* is well aware, that the natural aroma arising from the root at the commencement of the operation every hour becomes less and less perceptible, till at length, by the time it is boiled down to "*one half*," as directed, it is entirely lost;[1] and in proportion as we drive

(1) Souberan remarks, that "an infusion of sarza which is odorous and sapid at first, parts with both its aroma and taste by boiling for a few minutes." It is well known that the emetic properties of ipecacuanha are destroyed, and Cinchona bark is rendered inert by long decoc-

off this principle is the product depreciated in value. To obviate this evil, much has been said about evaporation *in vacuo*, as a great improvement upon the old plan of preparing concentrated decoctions, extracts, &c. If so much heat were really necessary, it might be considered an improvement: but improvements in the preparation of medicinal substances can only be accounted as such in relation to their effects on the *quality* of the product; and sarsaparilla, it so happens, is a substance not improved by the application of heat in any shape, which, when *long continued*, converts a great portion of its *extractive principle* into insoluble matter.

For the information of those unacquainted with the several forms of this medicine, or who might wish to select one, the following may serve as a guide, including those according to the Pharmacopœia. The Compound Decoction (in imitation of the far-famed diet-drinks, or old Decoction of Sweet Woods) is generally preferred for domestic use; an improved form of which has been added,(*) for those who may wish to prepare it themselves; but no more should be made at one time than can be consumed, as hardly any decoction will keep. To others I would recommend the *concentrated* forms of the medicine herein mentioned, such as the *Compound Fluid Extract*, or, as it is sometimes termed, the *Essence of Sarsaparilla*, a little of which added to water immediately forms the decoction without further trouble, and which, *providing a superior form is obtained*, will be found (in addition to its convenience) of far greater strength and efficacy than any of the following.

tion, while many eminently poisonous herbs by the same means have been rendered comparatively harmless. Orfila relates the circumstance of a person having swallowed considerably more than a drachm of an ill-prepared extract of hemlock in the shop of an apothecary without any ill effects, whereas twenty grains would in all probability have proved fatal, had it been properly made.

FORMULÆ.

The Decoction.—Take of sarsaparilla root sliced, *five ounces;* boiling water, *four pints.* Macerate four hours; then take out the root and bruise it, and return it to the liquor. Macerate it for two hours more, and boil it down to *one half*, and strain.—*London.*

Take of sarza in chips, *five ounces;* boiling water, *four pints.* Digest the root in the water two hours, at a temperature below boiling; take out the root and bruise it; replace it, and *boil* down to *two pints.*—*Edinburgh.*

Take of sarsaparilla sliced, *two ounces;* boiling water, a pint and a half. Digest the root with the water, *one* hour; boil *ten minutes* in a covered vessel, and strain.—*Dublin.*

The Compound Decoction.—Take of the decoction of sarza *boiling*, four pints; sassafras chips, guaiacum, and liquorice root, of each ten drachms; mezereon, three drachms. Boil a quarter of an hour, and strain.—*London and Edinburgh.*

Take of sarsaparilla two ounces; sassafras, guaiacum, and liquorice root, bruised, of each two drachms; bark of mezereon, one drachm; boiling water, a pint and a half. Digest the whole in a covered vessel one hour; boil *ten minutes*, and strain.—*Dublin.*

* *An Improved Form.*—Take of raspings of guaiacum, one ounce and a half; fresh liquorice root, sliced, two ounces; bark of mezereon two drachms; carbonate of soda, one drachm; (1) boiling water, four pints.

(1) Soda added to the aqueous menstruum has been found highly serviceable as a solvent for the constituents of sarsaparilla. It has been successfully employed for some time past in the preparation of one of the most excellent forms of this medicine we have (D'Vere's.) In addition

Infuse in a covered vessel six hours; then simmer twenty minutes, and pour the hot fluid through a clean sieve upon sarsaparilla sliced ten ounces; sassafras chips, two ounces. Cover, and when cold add from two to four ounces of rectified spirit; and in a few hours pour off the clear for use. (3)

The Compound Infusion.—Take of sliced sarsaparilla, six ounces; liquorice root, two ounces; sassafras chips, two ounces; carbonate of soda, half a drachm; warm water, four pints. Let them digest in a covered vessel twelve hours, and strain for use.

Alkaline Infusion.—Lime water is used in lieu of the ordinary menstruum. But this is very objectionable, being rather calculated to retard the process of extraction than promote it. Besides being a bad solvent of the active principles of sarsaparilla, it renders the preparation unpalatable.

Syrup of Sarsaparilla.—Sarsaparilla, three pounds and a half; distilled water, three gallons. Boil the root in two gallons, first, down to one. Strain, and boil again in the remaining gallon to half; then strain, and evaporate the whole to two pints; in which dissolve eight ounces of sugar, and, when cold, two ounces of rectified spirits.—*London.*

addition to exhausting the root of whatever essential properties it possesses, it checks the natural tendency of the saturated fluid expressed from the sarza to run into fermentation. Besides its advantages in preparing the drug, it renders the system at the same time more susceptible to its action.

(3) In this improved form of the Compound Decoction, the *guaiacum* and *sassafras*, as useful auxiliaries, are purposely increased; also the liquorice root, *to make it more palatable;* while the *mezereon*, which is very apt to produce nausea, has been reduced. The simmering, in the first part of the process, is only necessary to extract the balsamic properties of the *guaiacum;* the hot fluid, aided by the soda, will be all-sufficient to *exhaust* the *cortex* of its *colour, aroma*, and *acrid principle* (provided the root is of good quality, and contains it.) It is a better form than any of the preceding, and is less liable to decomposition.

Or,

Sarza, fifteen ounces; boiling water, one gallon. Infuse twenty-four hours, boil down to four pints, and strain. Add fifteen ounces of sugar, and evaporate to the consistence of syrup.—*Edinburgh.*

These syrups are very inefficient forms of the medicine, being seldom of sufficient strength to render any very great service. They are much better and more readily made by the addition of a few drachms of the *Fluid Extract* to a little simple syrup.

Combined Form.—Take of the decoction two ounces; *Compound Fluid Extract of Sarsaparilla,* two drachms. This is a favourite form with some physicians, and said to be *very effectual,* owing to the addition of the *Fluid Extract.*

The Lisbon Diet Drink.—Take of sliced sarsaparilla, six ounces; lignum santalum, sassafras, guaiacum, and the root of glycyrrhiza, of each three ounces; mezereon, half an ounce; antimony, two ounces; distilled water, ten pints. Macerate for twenty-four hours: then let it simmer down to half the original quantity. Formerly held in great repute.

The Jarra del Rey.(4) A celebrated form of sarsaparilla in Brazil. —Take two pounds of the red sarza; half a pound each of sweet root (glycyrrhiza) and guaiacum bark; and two ounces of the bruised roots of the sassafras tree. Pour upon these a gallon of boiling water, and cover it up; when cold, add a pint of spirit and a pound of sugar, and let it digest fourteen days, in a cool place; then pour off the clear fluid for use.

DOSES.

The ordinary dose of the Decoction or Infusion of Sarsaparilla is from four to six ounces three or four times a day; or half a pint or more twice a day. Of the Fluid Extract, from two drachms to a dessert spoonful, in a tumbler of spring water.

(4) The *Jarra del Rey,* in some parts *Jarave.* A very popular remedy among the colonial Spaniards, and said to have effected the most extraordinary cures in obstinate cases among the aged, and even the *crippled,* from chronic rheumatism, the yaws, and a host of complaints.

The Powder.—Sarsaparilla is sometimes prescribed in the form of powder; but as its medicinal properties reside only in the cortex, there appears no necessity for including the woody fibre and starchy matter, which increase its bulk, and overburden the stomach with a substance of no service whatever, unless it be to produce nausea or vomiting, which this form of the medicine very frequently does; besides which, the powder is the most subject to adulteration. (5)

The Pills.—This is also a very doubtful mode of deriving the advantage of sarsaparilla; it is not a legitimate form, nor ever prescribed by a regular practitioner. Nevertheless numerous quack remedies are advertised under this head; they are sometimes made from cheap and inferior extracts, and sometimes (like many other nostrums under the name of this medicine) not of sarsaparilla at all. Allowing them to be prepared from the extract, a pill or two is of insufficient strength to render them of any service; and if a great number are to be taken in the course of the day, they become in the end as expensive as the proper form.

The Extract.—The *solid* extract is not generally considered a good form of sarsaparilla; it has been subjected to too much heat, and the concentration carried further than is consistent with the soluble materials of the drug, by which its *extractive* frequently acquires an unpleasant empyreumatic flavour, or a part of it becomes converted into carbonaceous matter, and is consequently rendered inert. Dr. Christison says, "This preparation is generally and justly distrusted, owing to a suspicion that prolonged heat, besides expelling the volatile principles, may effect important changes in the fixed organic constituents of the root. The colleges therefore, pro-

(5) Dr. Pereira mentions, that the root from which the Extract has been made is sometimes re-dried and employed in the preparation of the powder.

perly dropping the common extract *altogether*, have substituted the *Fluid Extract of Sarsaparilla*, in which the concentration is not carried so far."

The Fluid Extract.—This has proved to be not only the most eligible mode of administering sarsaparilla, but also more compatible with the preservation of its active properties; in consequence of which it has superseded the *solid* form, and very properly taken a place in the Pharmacopœia. It obviates the trouble and inconvenience attending the preparation of the infusions or decoctions, while at the same time there is no loss by *decomposition*, common to all the watery forms, which if kept beyond a couple of days become unfit for use. When well prepared and from the *finer qualities of the root*, the Fluid Extract of Sarsaparilla, especially the *Compound*, may be said to be the *multum in parvo* of this medicine in its most convenient shape, and, though *apparently* dearer at first, decidedly cheaper in the end, two fluid drachms being equivalent to half a pint of the Decoction, and far more efficacious, providing the patient makes choice of a good preparation. Particular attention must be paid to this, as numerous preparations known as "Concentrated Decoctions," &c. are sold for the Fluid Extract, many of which are nearly as *poor* and *thin* as the decoction itself.

The Compound Fluid Extract of Sarsaparilla.—This form of the medicine is now more generally prescribed than the preceding or simple form, for the following very just reasons,—one of the active elements of sarsaparilla as already shown, (providing the root is genuine) consists of a certain pungent *acrid* principle more or less present, according to the quality of the drug. Now it is this very acrimonious property of the sarsaparilla when prepared *alone* or without those adjuncts entering into the *Compound* form, that so often disturbs the stomach, induces *nausea*, and very frequently

obliges many to discontinue taking it, who might otherwise have derived the greatest benefit from such a remedy. But this inconvenience may be obviated by adopting the *compound* in lieu of the simple form, where it disagrees with the patient or deranges the stomach. By the addition of such *adjuncts* as the guaiacum, mezereon, liquorice root, sassafras, and other warm aromatics, the effects of this acrid property of the sarza become completely modified and corrected, and the preparation improved in every respect, rendered more grateful to the palate and agreeable to the stomach; besides which, in the concentrated form, these additions materially tend to preserve the active vegetable principles of the sarsaparilla *unimpaired*, and render them less liable to undergo those changes they would otherwise do without them, while, I am convinced, they augment the curative powers of the root constituting the *basis* of the preparation; in fact, so invariably is the *compound* form of this medicine found the most efficient of the two, that I venture to predict, ere long it will have a place in our Pharmacopœia in preference to the simple.(6)

The Best Form of the Compound Fluid Extract will be found to be the *Concentrated* Preparation of Sarsaparilla known as D'Vere's, prepared by the *cold process*.(7) This much-

(6) Dr. Garrod, in his late edition of Thomson's London Dispensatory, under the head of *Extractum Sarsæ Liquidum*, very justly remarks, "It would have been well, had the College introduced a *Compound Fluid Extract*, as several preparations purporting to be of that nature are now extensively employed in practice."

(7) Preparations by the *cold process* appear to furnish the most eligible and efficacious form of this medicine. Even maceration of the bruised root in *larger quantities*, less water, and at a lower temperature, is a far preferable mode of procuring the active properties than prolonged boiling; so much so, that sarsaparilla taken from the same parcel prepared in this way has been found to produce very different results to that which had passed the *usual ordeal*, and undergone the repeated ebullitions and evapo-

approved form of sarza has been largely employed by the Profession for some time past, among many of whom it has attained considerable reputation. From comparative trials with similar preparations of the kind, it appears to claim a decided preference, having been extensively used both in *hospital* and private practice, and with marked success in many obstinate and intractable forms of disease, where the ordinary preparations have failed to afford the same results. It is prepared under the personal superintendence of a medical man, who has specially devoted his attention to the matter; and, from its known efficacy, I feel it would be an act of injustice to omit mention of such a useful preparation, not less to the merits of the remedy itself, than to those who might be seeking the advantages to be derived from it; more especially as my opinion may be strengthened by the testimony of a number of gentlemen whose professional abilities entitle them to great weight, who are in the habit of daily prescribing it, and would have no hesitation in declaring with myself that it is one of the most efficient forms of sarsaparilla to be met with.

In addition to the better quality of the root employed in this preparation, much of its superior efficacy, as compared with other forms, depends upon the process by which the pharmaceutical product is obtained. By an improved *modus operandi*, aided by hydraulic pressure and other means, a *cold men-*

ration upon the old plan of the Pharmacopœia. But none who have obtained a reputation for their preparations of this drug strictly adhere to this; they invariably use water at a temperature far below boiling, and in some cases entirely *cold*. The superior efficacy of such forms sufficiently attests the advantages derived from this process; they possess principles the ordinary preparations have parted with, and yield a richer product in every respect.

struum is loaded with the entire soluble material of the root, and finally concentrated upon a principle whereby the whole of its *volatile* properties as well as *extractive* are retained,— a desideratum so essential to its success as a remedy. The crushed root of the sarza is treated entirely separate from the other ingredients, as the guaiacum, mezereon, liquorice-root, &c. (all necessary adjuncts when correctly prepared); while the nuts of the Rio-Negro sassafras tree are substituted for the ordinary chips, — an important addition, which at the same time that it increases its remedial powers, assists to preserve it, and communicates an agreeable aromatic flavour. In addition to its greater efficacy, it appears also to furnish the *most agreeable* form of sarsaparilla, free from fecula or any other impurity, wholly soluble, with all the active constituents of the root UNALTERED by any process it has undergone, and capable of preserving its properties for any length of time.

The preparation may be obtained of Mr. KEATING, Chemist, St. Paul's Church-yard, and I believe, by order, of any respectable druggist; but it will be necessary to state particularly the kind required, "D'VERE's Compound Fluid Extract," there being a wide difference between this form of the medicine and the ordinary Concentrated Decoctions of Sarsaparilla usually kept in the shops. (8)

(8) In prescribing, physicians are sometimes delicate about mentioning any *particular* form of a medicine; but in this case, without specifying in writing the preparation intended, I have found the patient may be deprived of its advantages by the substitution of some inferior form. But, in justice to the first-class houses, I have generally found simple enquiry all-sufficient to obtain this or any other *special* preparation.

MEDICINAL OPERATION AND EFFECTS OF SARSAPARILLA.

The usual head under which the operation of sarsaparilla is received in medicine, is that of an *alterative*, capable of effecting a change in the system, and re-establishing healthy action in certain disordered conditions, without producing the more immediate and sensible evacuations of *sweating*, *purging*, *vomiting*, &c., experienced from remedies of a more powerful nature. A variety of medicinal agents may be used as *alteratives*, as mercurials, the iodides, &c.; but none of these offer the combined advantages of a *diaphoretic*, *tonic*, *stomachic*, *nutritive*, and *depurative* (all of which under proper circumstances can be derived from a good form of sarsaparilla), nor its *mild* and efficient mode of action, without deranging the general health. Unlike medicines of the mineral-metallic class, it materially augments the strength during its alterative effects in the system, and is so safe, that all sexes, ages, and temperaments may take it alike, without watching or restriction, and with equal benefit, as the more it accumulates in the system the better. It is, without doubt, a depurative of great value; and nothing more than the absence of those *immediate* results we are apt to witness from the exhibition of *more active* agents has led us *too hastily* to conclude that a remedy so gentle in its operation, and producing such slight effects on the animal economy, can hardly accomplish the numerous cures so frequently assigned to it. But that it nevertheless does, and often *when other means fail*, we have daily instances to prove, particularly in a depraved habit of body, or those disordered conditions ascribed to a deranged state of the fluids, or

a weakened or otherwise morbid state of the system, which the *alterative* properties of this medicine so readily correct, while its tonic and nutritive qualities seem to confer lasting benefit on the constitution, even long after the remedy has been discontinued.

Like most depuratives, sarsaparilla necessarily requires some little time to determine its efficacy. Its remarkable influence in altering and amending the habit, *upon which the cure of so many diseases depends*, may not immediately manifest itself; it must in a measure saturate the system before its direct agency upon the functions of *secretion* or *excretion* can be fully experienced. Hence the necessity of not coming to too hasty a conclusion as to its claims before it has been *fairly* tried; for it frequently so happens, we discontinue it at the very moment we ought to persevere in its use. But when its alterative action is once established, such a salutary change commences in the several fluids of the animal body, and upon the processes of *digestion, chylification, assimilation,* and *sanguification,* that improvement must speedily follow, with a corresponding alteration in morbidly deranged structure,—in short, it may be said to set up in the system an action of its own incompatible with a morbid one; which, during the exhibition of this medicine, may account for the unexpected disappearance (*in many forms of cachectic disease*) of those morbid symptoms the remedy seems so peculiarly adapted to encounter. But we must bear in mind, no extraordinary advantages can be derived from its use in a day, nor by a few doses; but a course of the medicine *taken regularly* and for some time, provided a due regard be paid to the quality of the preparation, will furnish undeniable evidence of its utility in the cure and eradication of a multitude of complaints that appear to yield to nothing else; eliminating and carrying off those morbid particles set afloat in the system, *viâ* the emunctory outlets of the *glands* and *exhalants of the skin.*

the *lungs*, the *kidneys*, and the *bowels*, to be replaced by materials of a more healthy nature, *though in a most imperceptible and progressive manner*, much in the same way that a drop of water in time wears a hollow in a stone, not by its violence, but by its frequent falling.

Popularly this medicine has long been known as "a purifier of the blood," and perhaps not without reason, as, in accordance with this pathological opinion, it appears not improbable that it may exert a *specific* action upon the blood itself, as well as on the emunctories that rid it of any morbid or unnatural product incompatible with health. It is well known, that many forms of disease depend upon some fault or deficiency of the blood;(1) now no medicines are more effectual in removing them, or rather in counteracting the morbid conditions by which they are produced, than those that assimilate themselves with this fluid, and, by changing its quality or supplying it with some lost principle, enable it to pursue its course charged with the power of exterminating any unhealthy material it may come in contact with; this appears to be the *modus operandi* of sarsaparilla. At all events, it frequently proves a very powerful means of combating a large class of disorders said to be dependent upon a depraved condition of the blood, apparently effecting such a series of changes in its constituents that at length both the cause by which it was induced and

(1) Scurvy is well known to be owing to a thin and poor condition of the blood; scrofula, to the presence of a morbid poison; debility, languor, paleness, &c., to a deficiency of fibrin, or a want of its red globules; gout and rheumatism, to an excess of acid; and some other forms of disease, to its preternatural *saline* properties, putrescent, impoverished, or *tuberculous* condition, as in consumption. Besides which, the use of many medicines, as mercury, antimony, the iodides, &c., cause deterioration of the blood, followed by general debility and emaciation, which the use of sarsaparilla at the same time will frequently obviate.

the disease gradually disappear together. Geber asserts, that "of all the medicines nature has given us; there is not one which so decidedly affects the state of the blood as sarsaparilla; it both purifies and improves it, and, thereby, the whole system."(1) No doubt, much of the salutary influence it thus exerts may be attributed to its primary operation upon the functions of digestion, as the blood is much dependent for its *quality* or *purity* upon the thorough performance of this process, by which a due supply of nervous energy is communicated to the several organs of secretion and excretion, enabling them to resume their proper functions and restore a healthy equilibrium; or it may have a direct restorative effect upon this fluid, supplying it with some essential element necessary to its proper condition, or that may promote its due activity and more general circulation. But, by whatever means it is accomplished, it is very generally believed that a course of sarza materially tends to improve the condition of the blood, and consequently it is largely employed for that purpose as a remedial agent in the cure of a number of complaints having their origin in this source. It also proves equally valuable as a *preventive medicine*, in counteracting a constitutional tendency to certain forms of disease, as those of a *scorbutic*, *scrofulous*, *hectic*, or *gouty* character.(2)

Its most obvious action is that of a *diaphoretic*, in promoting the secretions of the skin, by which evacuation a great share of its alterative effects are carried out. Its operation appears somewhat allied to that of ipecacuanha, the antimonials, &c., but without their *nauseating* or *debilitating* consequences. It may be said to possess an action peculiarly its own in concour-

(1) Lectures on the Blood.

(2) With this view many persons commonly take sarsaparilla as a *depurative* in the spring and fall of the year.

aging *gentle* diaphoresis, and a more regulated exercise of the exhalants; communicating *tone* to the capillaries, enabling them the more effectually to fulfil their proper office, the deep-seated vessels as well as the superficial outlets, by which the blood is liberated of any morbid material the system may be suffering under. Nothing is more remarkable than its agency in altering the condition of a secretion. I have seen some striking instances of this in several very unpleasant and painful cases of fœtid perspiration.(3) And not only does it eliminate these impurities by the skin, but, if the system be sufficiently saturated with the sarza, likewise by the *breath*, by *pulmonary* transpiration. Some systems seem far more susceptible of its diaphoretic action than others, while in many cases it requires to be taken in very large doses, and continued for a length of time before this effect becomes fairly established, *though unquestionably this very much depends upon the quality of the preparation employed.* In some a short course suffices, as I have experienced in my own person, during its employment for the removal of chronic rheumatism; at first the slightest exertion was followed by profuse diaphoresis, but in a few days this effect gradually subsided, as well as the symptoms for which I had taken it, and my general health rapidly improved under its use. When its *immediate* effects are required, taking it *hot* wonderfully augments its diaphoretic

(3) Fœtid perspiration almost amounts to an affliction with some persons, and frequently precludes them from moving in society as they otherwise would. I knew a lady, of great personal attractions in other respects, suffer considerably from such a condition (though of the most cleanly habits), and who, after trying various means to get rid of it, was effectually relieved at length by a course of sarsaparilla. The same frequently applies to an offensive state of the breath. We sometimes read of "Sarsaparilla sweetening the blood;" I can answer for it sweetening the breath, as I have found it do in a great many instances, where it was anything but agreeable previous to its use.

action, and forms a most powerful sudorific. I have seen a table-spoonful of the Fluid Extract before-mentioned in a tumbler of hot water, taken at bed-time, (substituted for a Dover or James's Powder) create a copious flow of perspiration, strongly impregnated with the odour of the preparation. However, hot ptisans of sarza are nothing new.(4) I know many medical friends who prescribe it in this way with remarkable success, in a variety of disorders where remedies of the kind are indicated, and where antimonials and similar agents might prove decidedly *hurtful*. Unlike these, sarza, in lieu of relaxing the system, leaves behind it *tonic* effects, and, as already shown, rather tends to improve than impoverish the blood.

To precisely define each and every mode whereby this remedial agent accomplishes its ends we cannot pretend, any more than to correctly determine the *modus operandi* of many other substances, whose supposed physiological effects may be but a guess at the best, as medicines act in many and various ways we are unable to explain, and perhaps none more so than sarsaparilla. Its obvious effects upon the system at first are comparatively slight. And hence, some have been led to doubt its therapeutic value on this ground; others, that it produces *no very sensible operation upon a sound and healthy individual*. But upon neither of these grounds can we fully determine its claims as a curative agent, more particularly in the latter case, where the morbid condition it was destined to

(4) Dr. Hancock mentions, that "the Macoosis, Caribs, and other Indian tribes, take a very effectual method of relieving themselves when attacked by fever, inflammation, ague, rheumatism, and other complaints, by the use of hot ptisans made from sarsaparilla, and also employ a sort of vapour bath of the same, by which copious sweats are induced, the patient falls into a sleep, and usually awakes freed from his complaints." —*Remarks on the Indian Practice of Medicine in Guiana.*

encounter does not exist, or condemn it merely because it has done nothing where there was nothing to be done; nor, again, can we measure its value by a few odd doses.(5) However, the less sceptical and more practical seem content to know, that certain salutary changes in the system decidedly take place from its use, and, confident of this, prescribe it accordingly. From its results in so many forms of disease, there can be no doubt of its *direct* influence on the blood, and more or less upon the secretions formed from the blood, which it is capable of *altering* or *restoring* to their natural condition, while by the blood it is also conveyed to the particular organs and tissues of the body, to carry out still further changes, especially upon the functions of secretion, promoting their proper action; all of which it may possibly accomplish by combined means, as sarsaparilla possesses several properties, as frequently experienced, in addition to its *alterative, tonic,* and *restorative* effects. It furnishes strong evidence of its use as an *aliment,* easily digested, absorbed, and assimilated to the several textures of the body it serves to reconstruct. In proof of this, it adds rapidly to the *weight* as well as the *strength* of the most lean and emaciated, who, I have frequently observed (and so have many others), become plump, fat, and strong under its use.(6)

(5) Dr. Pereira remarks, that "some are apt to refer any improvement in a patient's health under the use of sarsaparilla, either to natural changes in the constitution, or to the influence of the remedial means with which it is conjoined." "I would observe," he says, "that hitherto no experiments have been made to ascertain what effects the long-continued employment of sarsaparilla may give rise to in the system of a healthy man; and we are not warranted in assuming that none would result, because none are observable from the employment of a *few doses.*" —*Materia Medica,* vol. ii., p. 1171.

(6) The remarkable nutritive properties of sarsaparilla are not due, as many imagine, to any amylaceous matter it may contain; on the contrary, the more pure the preparation, and free from fecula, the more fattening,

Primarily, a good form of sarza appears to have a remarkable influence over the stomach and digestive organs, creating a sensation of warmth somewhat similar to that left behind in the mouth and throat after masticating a small quantity of the root. This is usually succeeded by hunger and increased appetite, no doubt from arousing the nervous energy of the stomach and neighbouring viscera, promoting the secretions and accelerating the process of digestion; hence frequently, when given as a *depurative*, we find sarsaparilla of the greatest service in getting rid of a great many disordered conditions under the general head of *dyspepsia*. It gives tone to the stomach, and usually occasions a pleasant moisture of the mouth, cleanses the tongue, sweetens the breath, encourages a more lax state of the bowels,(7) and a somewhat increased flow of urine, in which occasionally may be observed an odour of the medicine, though this more especially marks its *diaphoretic* action and exit by the sudoriferous ducts of the skin,(8) and may be taken

in many cases of weakness and wasting from defective nutrition or other causes; and in scrofulous or consumptive habits, where cod liver oil seemed of little service, or excited nausea, I have known persons take to a good form of sarsaparilla with the happiest results, and gain flesh rapidly, followed by a degree of strength and activity they had been unable to obtain from any other means.

(7) The use of sarsaparilla has a remarkable effect in checking the tendency to constipation, and removing inactivity of the bowels. In a great many instances where the medicine has been prescribed simply as a *depurative*, and where the parties have been invariably compelled to resort to purgatives, it has brought about a greater regularity in this respect than they had previously known for years.

(8) It is by no means uncommon for persons under a course of sarsaparilla, especially its superior forms, to call your attention to the peculiar and agreeable odour imparted to their apparel, and more particularly the bed-clothes, during its use. I have frequently remarked, in cases of rupia,

as a good criterion of both the quality of the preparation and its efficient operation, being usually followed by marked daily improvement and the more regular exercise of all the functions. In fine, from its remarkable agency upon the capillary and adipose systems, and the alteration it effects in the *solids* and *fluids* generally, by *improved nutrition*, *nervous sensibility*, *secretion*, and *assimilation*, we may conclude the active elements of sarsaparilla go a great way to form *new* as well as transform *old* materials, by which means in time the tissues of the body become reconstructed.

DISEASES IN WHICH SARSAPARILLA MAY BE EMPLOYED.

Sarsaparilla, both *alone* and as an adjunct to a variety of other alterative and diaphoretic remedies, is very generally prescribed in the treatment of the following complaints, in which the therapeutic agency of a good form of the medicine is frequently found of eminent service :—secondary symptoms and the sequelæ of syphilis; mercurio-syphilitic affections; scrofula, and scrofulous glandular tumours; struma, and tuberculous disease in many forms; scorbutic complaints; boils and carbuncles; cutaneous affections; scaly papular and pustular

impetigo, pemphigus, eczema, and some other varieties of skin disease, the symptoms rapidly disappear upon this effect being produced, and its results are always more certain and *lasting*. I look upon it as clearly establishing one way in which this medicine works such beneficial changes in the system, and a proof it can permeate the whole mass.

eruptions; chronic rheumatism, chronic inflammation and immobility of the joints; atonic gout; dyspeptic disorders; indigestion, and its concomitant evils; external or internal ulceration; scirrhous and cancerous tumours; many morbid deranged or faulty conditions of the blood, as *anæmia* or its insufficient formation, languid circulation, &c.; loss of colour, flesh, and strength; local or general debility; incipient phthisis; and in most *hectic* and *cachectic* complaints, where *alterative, tonic,* and *restorative* remedies are indicated.

As an Anti-Syphilitic, the real value of sarsaparilla has been in a great measure misunderstood. Although it may not manifest the more *immediate* effects of *mercury* administered in the primary stages of this disease, nevertheless a good form of the medicine frequently furnishes abundant evidence of its alterative agency on the blood and secretions, which enables it to counteract the morbid conditions of the system under such circumstances the same as in other cachectic complaints. In regard to this particular class of disorders, it appears that the claims of sarsaparilla have been both *over* and *under* estimated. Upon its first introduction it was looked upon as nothing less than an *absolute specific* in any and every stage of the disease; but, failing to perform all the miracles expected of it (probably, from difference of climate[1]), many began to question its curative powers altogether, consequently it fell into disuse, and for a length of time its *true merits* as an *auxiliary* remedy were lost sight of. However, time and experience ultimately proved how far medical skill might reckon

(1) Mutis, in his correspondence with the younger Linnæus, mentions, that "scarcely any form of the disease resisted his method of administering a drink of this medicine." The difference of climate, no doubt, may both modify the *remedy* and the *disease*. In South America syphilitic affections are said to yield readily to sarsaparilla.

on its assistance in such cases; though it might not exert any *immediate* effects upon the primary phases of the malady, still in many of the more obstinate and *intractable* forms of the disease it frequently proved of infinite service. In consequence of its marked success in many cases of this kind, it again came into repute as rapidly as it went out, and has continued to be successfully employed in the treatment of syphilitic affections to the present time. Although sarsaparilla may not perhaps claim the character of a *specific,* it is nevertheless a therapeutical agent of great value, and may even possess anti-syphilitic properties *peculiarly its own.* Many are of opinion that an *efficient form of sarsaparilla* is capable of restoring a patient to health independent of mercury and other means. (2) At all events we frequently find its use succeeded by rapid improvement, and that it is capable of promoting the cure and conferring incalculable benefit in many cases where the ordinary means seem unavailable, while, conjoined with other remedies, it forms a most valuable adjunct in almost any stage of the malady.

(2) Dr. Hancock observes in regard to sarsaparilla, "It is also a powerful remedy in syphilis, and one that *does not* require the assistance of mercury. This will scarcely be assented to; but the assertion would not be advanced had I not seen its effects frequently and fully demonstrated."—*Medico-Botanical Transactions.* In the sixteenth and seventeenth centuries sarsaparilla, guaiacum, antimony, and other sudorifics were successfully employed in the cure of these complaints without the aid of mercury. Now if it were impossible that this disease could be effectually overcome by any other means, previous to the use of this mineral no one could ever have recovered. But there is no want of evidence to prove the contrary; indeed, it is a question whether the absolute reliance on mercurial remedies, to the exclusion of other methods of cure, may not in its time have committed greater havoc than the malady for which they were administered. In many habits a mercurial course in its *mildest form* often realizes the old adage, "that the remedy is worse than the disease."

In alluding to its anti-syphilitic claims, we do not pretend to say that sarsaparilla possesses the minero-metallic properties of mercury, or that it exerts the same effect in such cases as the iodide of potassium; nevertheless it renders both these remedies *more certain*, and supports the system under their use, while, added to this, the disease is less liable to leave behind any latent consequences. Again, in certain conditions where mercurial remedies seem contra-indicated, as in scrofulous habits, extreme debility, irritability, &c., or where the disorder will not yield to that remedy, but rather seems aggravated by its use, then sarsaparilla may be applied to in the fullest confidence, and (strange to say) it is in these *obstinate cases*, as in many other forms of so-called incurable disease *where the malady may have resisted the ordinary means of treatment*, that this medicine frequently furnishes the most striking evidence of its success. Truly sarsaparilla as a *simple vegetable alterative* may not possess the power of chemically neutralizing or destroying the syphilitic poison, nevertheless it may have many ways of counteracting its effects we are unable to account for, as well as the power of expelling it from the system, as it manifestly does the *morbid materials* in most *cachectic* disorders.

It is usually employed in syphilitic pains of a rheumatic character, affections of the bone and periosteum, in the removal of eruptions, and promoting the healing of ulcerations, old sores, &c. Likewise where the constitution has become enfeebled and emaciated by the repeated attacks or long continuance of the disease, or the blood impoverished and the health undermined by the injudicious use of *mercury*, the *iodides*, &c., in such cases it frequently recruits a patient's health and strength in a most surprising manner. Sir William Fordyce long since remarked, that "Sarsaparilla, in emaciated and consumptive habits from such causes, was the greatest

restorer of the *appetite, flesh, colour*, and *strength* he knew of;" while the majority of physicians and surgeons have come to the conclusion, that this form of disease, like many others, may be much earlier and more effectually subdued by administering sarsaparilla in conjunction with the usual remedies than when they are given without it. And, *after mercury*, as Dr. Woodville remarks, " I have known patients much sooner restored to health by this root than could have been accomplished by any other medicine with which we are acquainted." But independent of any anti-syphilitic properties it may possess, it at the same time tends to support the patient's strength, both under the disease and the remedies employed to overpower it; in short, in this as in most debilitating disorders, it serves a similar purpose that props do to a dilapidated dwelling,—it prevents the fabric falling about our ears while the repairs are going on.

In Mercurial Affections sarsaparilla is a most valuable medicine, as much so in their *prevention* as *cure;* indeed, a course of mercury should never be commenced without it in any form of disease, as it not only assists its operation, but materially tends to prevent its more *violent* effects on the system. In some constitutions the use of this mineral, *internally* or *externally*, operates as a poison, creating universal irritability, hectic fever, and the most alarming symptoms, succeeded by certain painful eruptions and excoriations of the skin, technically termed *mercurial eczema*. In others it occasions excruciating pains of a rheumatic character, synovial affections, enlarged and locked joints, membranous nodes, and diseases of the bones and periosteum. In the removal of such symptoms, or on their approach, a *warm* drink of sarsaparilla may be employed with manifest advantage, succeeded by sarsaparilla and quinine. Where mercurial remedies are absolutely neces-

sary, sarsaparilla, for safety, should always be conjoined with them. In many habits mercury is often a very unmanageable medicine in the most skilful hands, and one that requires great discrimination and caution; frequently, though administered in the most careful manner, and with no apparent result for some time, it so accumulates in the system, that salivation and its consequences come upon the patient all at once.

In Scrofulous Affections.—Sarsaparilla is deserving of considerable attention as an *anti-strumous* medicine, for as such it frequently forms one of the chief remedial agents in the management of this afflicting malady; indeed, few cases can be said to be *judiciously* treated without it. As well as in the *cure*, it frequently furnishes us with the means of warding off the more fatal consequences of the disease, or suffering the tuberculous matter to settle on some vital organ (as the lungs), which may occur in a scrofulous habit from the slightest cause, and terminate in *phthisis* or pulmonary consumption. But in a disease so deeply rooted in the system, it must be obvious, the *efficiency* of sarsaparilla as an anti-strumous remedy solely depends upon the quality of the preparation employed. Where it does not answer the desired end, it is not always the fault of the medicine itself; in nine cases out of ten, it might be traced here, as in other cases, to the causes already assigned; but, allowing we are armed with an efficient form of the drug, the benefit to be derived from its use in such cases are manifold, as it is also in the numerous shades and forms the disease assumes, both alone and as a necessary adjunct to the ordinary anti-scrofulous agents, as *mercurials*, the *iodides*, *iron*, *quinine*, *soda*, &c., all of which are rendered far more efficient by the co-employment of sarsaparilla. Independent of any special power it may have over the blood, in correcting its morbid or tubercular condition, or in altering and amend-

ing the habit, as it manifestly does in most *cachectic* states of the system, by its primary effects upon the stomach and digestive organs, and *restorative* properties generally, it is also of considerable service in removing the causes and consequences of *imperfect nutrition*, while at the same time by augmenting the general circulation, arousing the sluggish functions, communicating tone to relaxed fibre, improving the secretions, and promoting the more regular action of the skin, the kidneys, and the bowels, it assists nature in throwing off the disease of its own accord.

From its combined properties as a depurative, tonic, and restorative, sarza is regarded by many as one of the most valuable *anti-scrofulous specifics* we possess (especially in combination with quinine.) To say the least, it frequently affords a valuable *auxiliary* remedy in the treatment of either the local or constitutional forms of the complaint. It is of singular efficacy in scrofulous swellings, immobility and pains of the joints; assists in diminishing enlarged and diseased glands, and dispersing indolent tumours, and very frequently arrests the further progress of a painful abscess. It promotes the healing of intractable, deep-spreading ulcerations, and often proves of infinite service in scrofulous ophthalmia and affections of the eyes; in short, in almost any phase of strumous disease, both *during* and *after* the use of iodine, and also in those debilitated conditions where that remedy appears contra-indicated, it may be given with the happiest results *alone*.

In the treatment of a disorder having its origin in the blood, dependent for its development upon *debility*, and usually accompanied with depraved secretion, impaired digestion, imperfect nutrition, and a universal prostration of strength, nothing appears more rational than the employment of those remedial agents which, *though mild and gentle in their operation*, are no less efficient in working a gradual change in the system, and,

while they improve the condition, at the same time *strengthen* and invigorate the constitution. This, as already mentioned, is the *modus operandi* of a good preparation of this root. By its salutary action on the blood and secretions, upon the lymphatic system (commonly the seat of scrofula), and more or less upon the tissues of the body generally, it seems peculiarly adapted to counteract both the *cause* and *effect* of a *scrofulous diathesis*. I have frequently witnessed the most remarkable improvement follow its employment in strumous complaints, where the ordinary remedies had failed to afford the looked-for relief, and after the iodides, chalybeates, and cod-liver oil had long been tried in vain.(3) Indeed, experience on more than one occasion fully warrants my opinion of its decided utility, both in arresting the further progress as well as promoting the chance of cure in this disease.

Sarsaparilla *with* Iodine.—The various compounds of iodine being largely employed in the management of scrofulous com-

(3) I may mention the case of a young gentleman, in whom scrofula was making sad havoc, from running ulcerations behind the ears, at the side of the neck, and under the chin, from which he had suffered some time. Under the use of iodine in any form his symptoms always became aggravated, and though relinquished, and mineral *tonics*, chalybeates, and cod-liver oil employed, he daily grew worse, until at length his case appeared beyond hope. At this critical juncture his surgeon (an eminent man, but at that time an unbeliever in sarza) was induced, at the suggestion of the author, to try in this intractable case *what a really good form of that medicine would do;* which, as "a forlorn hope," he consented to; and although the patient was fast sinking, such daily improvement took place in his general health, appetite, strength, and spirits, that in less than a month under its use suppuration had ceased, the ulcers were fast healing, and the complaint apparently disappearing. From that time he gradually recovered, and, though it is now nine years since, has known no return, and enjoys robust health.

plaints, it may be as well to mention, that in no case should it be resorted to, without the use of sarsaparilla, which materially tends to prevent that *emaciation and prostration of strength* that almost invariably occur when iodine is employed without it. Much caution is required in the administration of the iodides at all times, and more especially in those delicate constitutions that usually characterize scrofulous disease. In some habits, as just shown, they seem rather to aggravate the symptoms than relieve them, deranging the digestive organs, inducing debility, depression of spirits, and many serious consequences we should endeavour to avoid. In diminishing diseased glands, it more or less affects healthy ones, and sometimes causes the absorption of the breast in females, and the decrease of the organs of virility in men. It also commonly occasions the loss of the hair;(4) in fine, for many reasons, iodine is a medicine that should be dispensed with as much as possible. However, where it is given, sarsaparilla materially modifies its action, and at the same time renders a *far less quantity than usually prescribed equally efficient.*(5)

(4) A short time ago a lady informed me, that, "being desirous of getting rid of a disfigurement on her neck (bronchocele), merely from a few applications of the ointment of iodine, salivation ensued, and her health suffered severely; in addition to which, a luxuriant head of hair fell off daily by handfuls, and left her completely bald.

(5) It is not absolutely necessary the sarsaparilla should always form the vehicle of the *iodide of potassium* or its other compounds. The best mode of administering this medicine is to prescribe it *separately*, the sarza being adopted more as a diet drink at the same time; and, as soon as the system seems sufficiently affected, or any unpleasant symptoms arise, discontinue the iodide, and continue with the sarsaparilla alone, oftener or in increased doses. Where iodine appears indispensable, alternating its use in this manner has frequently been attended with the best effects, where the system could not otherwise bear it.

As a PREVENTIVE *medicine in the prophylactic treatment of* SCROFULA.—Where there exists an hereditary tendency to the disease, often handed down to each succeeding generation of the same family, a slight course of sarsaparilla now and then, from its salutary effects on the system generally, frequently proves of the greatest service in keeping this insidious disorder in subjection, thus obviating the consequences. By persons of a weakly strumous habit of body or who appear predisposed to such complaints, it should always be taken in the spring and fall of the year; it may also be most advantageously conjoined with change of air, sea-bathing, &c. Occasionally resorted to in this way, it may prevent much mischief that might otherwise ensue, and probably in course of time extinguish the germ of the disease altogether.

In SKIN DISEASE.—From the direct effects of a good form of sarsaparilla on the *sanguiferous* and *lymphatic* system, the capillaries, and cutaneous exhalants, we may readily account for its efficiency in skin disease. It has been found exceedingly serviceable in the treatment of chronic eruptions, especially those occurring in weak and emaciated habits, or a scorbutic, scrofulous, or cachectic state of the system; though, by its general *alterative, eliminative,* and *diaphoretic* action, there can be no doubt of its utility in almost any form of cutaneous disease. In the scaly kind, as *lepra* and *psoriasis,* it has been employed with marked benefit; and in the papular and pustular eruptions, terminating in blotches and scabs, commonly attacking people in the spring and fall of the year, also in *eczema, impetigo,* and many other inveterate forms of skin disease.(5) As most cutaneous complaints are supposed

(5) As an instance of the efficacy of this medicine in some obstinate cases of the kind (when administered under proper circumstances), the

to be more or less connected with a *poor or disordered condition of the blood, debility, depraved secretion,* &c., and many diseases of the same source are curable by the same means, we may reasonably assume sarsaparilla to be as useful in correcting such a condition, or eliminating and carrying off the morbid materials by which it is induced under this form of disease, as any other a disordered state of the system might submit to our notice.

To persons of a dry, tense habit of body, or *harsh skin,* the occasional use of sarsaparilla frequently proves of the greatest benefit: by promoting gentle diaphoresis, it materially administers to its healthy exercise, and the discharge of its proper functions, and at the same time tends to remove that disposition to inflammatory redness, pimples, blotches, &c., from which many persons periodically suffer, while one of its well-known effects is, that the skin invariably becomes *plumper, fairer,* and *clearer* under its use. Indeed, a course of sarsaparilla, by promoting and improving the secretions, propelling the sluggish fluid through the veins and capillaries, and equalizing the circulation, frequently diffuses a tint and glow of health not to be derived from any other means, and often does more for *beauty* and a *delicate complexion,* than the arts of luxury, or the use of *washes, kalydors,* and *cosmetics.*(7)

author may mention the circumstance of a lady who had been afflicted for years with an inveterate form of skin disease, disfiguring the face, and more or less spread in patches over the whole surface. Notwithstanding all the usual remedies had been resorted to in vain, together with the use of the sulphurous water of Harrowgate, decoction of dulcamara, and even sarsaparilla (such as it was), without the slightest amendment taking place, *under the free use of a good preparation of the root (independent of any other medicine) she recovered in six weeks, the skin resuming a sound and healthy condition.*

(7) Many of these barber-ous nostrums cannot be mentioned otherwise

In Chronic Rheumatism.—From its well-known *diaphoretic* properties in promoting the secretion of the skin and exhalation from the surface of the body, sarsaparilla is likewise very largely employed in the treatment of chronic rheumatism, as also in some of the acute forms of disease termed by the non-professional *rheumatic gout*. The benefits to be derived from its use in such cases are usually referred to insensible sweating, because this seems its most visible effect; but chronic rheumatism, like most *arthritic* disorders, being dependent on *debility*, or due to defective secretion, faulty assimilation, the want of some principle or the presence of some unnatural product in the blood, sarsaparilla may do something more towards improving the patient's condition and promoting recovery by its *depurative, tonic,* and *restorative* effects on the system, as well as in eliminating from the blood any morbid material or vitiated secretion diseased action may have induced. *Diaphoresis* merely manifests its more direct operation; but from various other results there is no doubt of its remedial agency on the functions in general. In favouring cutaneous exhalation, it at the same time promotes the separation and passing off of the watery humour of the blood, with any morbid material it may contain, and that the system by such means may be enabled to get rid of.

than in terms of reprobation. They invariably contain lead or mercury, which by continued use may be carried into the system, and occasion the most serious mischief. Rather than improve, they impair the skin, and frequently give rise to the deformities against which they are used. A beautiful complexion can only really be obtained by means regulating internal health, which reflects itself upon the surface as a *mirror*, showing the uninterrupted harmony within. Pure blood and an equalized circulation are pretty good cosmetics, and far safer than wash or kalydor, for insuring a clear complexion and a sound and healthy skin.

Whether wholly due to its diaphoretic effects, or to certain other properties it may possess, of the precise operation or nature of which we may not be aware, I have known sarsaparilla afford signal relief sometimes in the most painful and protracted forms of this disease, after all other means have failed. I would recommend it in the more obstinate cases to be taken *hot* every night at bed-time (as previously mentioned, page 44); indeed, the extraordinary efficacy of *hot ptisans* of sarsaparilla as a therapeutic agent in many chronic affections is hardly known. Let those who would benefit by sarza in this way procure a good form, and try it in this or any other phase of *arthritic* disease, and they will soon experience the advantages to be derived from it. I have known many, by this simple plan, obtain relief they had long been strangers to.(8) Under its use the symptoms speedily subside, pain and stiffness give way to ease and motion, and every day as the effects of the remedy advance, so in proportion will the disease diminish.

I need hardly add, when relief is obtained, in order to establish a permanent cure, the sarsaparilla should be continued some time as an ordinary drink. Even in *acute* disease,

(8) I could authenticate the case of a gentleman (and no ordinary one) who some years back was a martyr to chronic rheumatism, where the joints were rendered immovable. So much so, that he became completely crippled, after years of suffering; and to use his own words, "having consulted half the medical men in the kingdom, tried the hydropathic treatment, the Bath waters, galvanism, hydro-electric chains, and every conceivable means," was recommended by his physician to try a course of hot sarza (on the author's plan), from which, though afflicted for years, he found the most signal relief, and, in less than two months from the time of commencing it, recovered the free use of his limbs, and—what is more singular still—though dreadfully reduced and emaciated by the disease, he regained his strength, and became *more fleshy* than he had ever been previously in his life.

many good remedies are given up too hastily, whereas if only used a sufficient length of time nothing would be more certain than their ultimate success; but in *chronic* complaints such a course is absolutely necessary, and in none more than chronic rheumatism.

Besides being given alone in such cases, it is occasionally conjoined with other sudorific agents, and commonly with *quinine*, which has proved a valuable adjunct; indeed, in many severe forms of chronic rheumatism, atonic gout, &c., as also in *scrofula*, *skin disease*, *dyspepsia*, and *debility*, where sarsaparilla *alone* does not speedily mitigate the symptoms, the combination of *sarsaparilla* and *quinine* (9) seldom fails to do so. Hence many physicians prescribe this form of the medicine in preference to the *sarsaparilla alone*, particularly in cases accompanied with constitutional weakness, wasting, &c. For my own part, I have sufficient faith, in the first instance, in a good form of sarza.

In Atonic Gout.—The greatest advantages have been derived from the use of sarsaparilla from its restorative effects upon the stomach and digestive organs, as well as a *depurative* and *diaphoretic* agent. In a disease associated with *disordered digestion*, *depraved secretion*, a *languid circulation*, *deficient perspiration*, &c., the utility of such a remedy must be obvious,

(9) The *Sarza-and-Quinine* is a very valuable combination of two good medicines now very extensively employed by the profession in the treatment of this class of disorders. The combination of the quinine (in the form herein-mentioned) is effected without the aid of *acid*, and offers an *eligible*, *agreeable*, and *efficacious* mode of administering these medicines. Each dose of the Fluid Extract of Sarsaparilla holds in solution two grains of quinine, and affords the patient all the *alterative* advantages of the former together with the *restorative* attributes of the latter medicine. This may be obtained at the same place as the Preparation of Sarsaparilla, referred to in page 39.

both in the *cure* and *prevention* of this complaint. Taken regularly, it appears to stimulate the liver, biliary ducts, and duodenum, while it increases the flow of urine, promotes the more regular action of the bowels, cutaneous exhalation, &c., and carries off the gouty matter *viâ* the proper channels. *Alterative* remedies have long been esteemed the most efficient means of combating this morbid condition of the system,(10) and a *genuine* form of sarsaparilla claims our first consideration in carrying out that object, not only by its effects in bettering the condition of the blood, but in communicating tone and vigour to the constitution *in general*, whereby the system is enabled to defend itself against the future attacks of the disease; and, by careful living, limited luxury, and its *continued use*, in time get rid of the *gouty diathesis* altogether.

During an attack of Gout.—The most efficient mode of administering this remedy, in the first place, will be *hot*, as first described, in which case it produces its more *direct* sudorific effects. Copious *diaphoresis* in a short time follows its use, frequently cuts short the paroxysm, and affords unexpected relief. The dose under these circumstances is usually a *table-spoonful of the Compound Fluid Extract to a tumbler of hot water*, and, as soon as relief is obtained, to commence the use of the sarsaparilla in the ordinary manner, whereby the natural tone of the system may be restored, and in many cases colchicum and the more potent remedies avoided.

In cases where *colchicum* cannot be dispensed with, many of its disadvantages may be obviated by its being administered in

(10) Sydenham says, "Such medicine should be persisted in daily; for since the cause in this and most chronic disorders becomes habitual and in a manner changed into a second nature, it cannot be imagined that a cure can be accomplished by a *momentary* change made in the blood and juices by any kind of medicine: the whole constitution must be altered, and the body in a manner formed *anew*."

sarsaparilla: while its efficieney is inereased by the addition of the sarza, the latter serves also to modify its aetion on the system, or rather aets as an antidote to that debility or depression of nervous power eolchieum leaves behind it in any other form; besides, another desideratum—*a much smaller dose will suffice.* By many for whom it has been preseribed in the *simple* form below, it has been pronouneed an absolute *specific.*(11) The late Sir Charles Seudamore (a great authority in sueh eases) mentioned to the author that he had sueeessfully employed sarza with eolehicum upon this plan, and that, sueceeded (*in a convalescent state*) by the sarsaparilla alone, it had exeeeded his most sanguine expeetations.

In Derangements of the Liver. — Sarsaparilla, from its salutary influenee on the funetions of seeretion generally, and thereby on the liver in common with other organs, seems also of eminent serviee in removing torpidity of that organ, eommonly ealled "a sluggishness of the liver," giving rise to a host of eoneomitant evils, as eonstipation, intestinal irritation, depraved appetite, impaired digestion, feculent odour of the breath, sallowness of eomplexion, lowness of spirits, languor, and debility. In many cases of the kind it appears to regulate the proper aetion of this organ, and propel the biliary seeretion by a healthy impetus to its right destination, there to mix itself with the alimentary residue, and bring about that peristaltie aetion of the bowels so essential to health and a

(11) Take from thirty to forty drops of the wine of eolehieum, a tablespoonful of the Compound Fluid Extraet of Sarsaparilla, to a tumbler of hot water; mix, and drink it off (like grog). Repeat the dose occasionally, if required. Discontinue the colchieum as soon as relief is obtained, and eommence a eourse of the sarza alone. I have known many, who had previously committed themselves to "patienee and flannel," experienee wonderful relief by this remedy and rapidly recover.

regular alvine evacuation, while at the same time the general health is restored by its secondary action.

In Dyspepsia, and many forms of disease consequent thereon, the use of sarsaparilla, either alone or in conjunction with quinine, as previously mentioned, is frequently productive of the most signal advantages, from the salutary change it effects on the secretions, as a general *corrective* and *corroborative* agent, as well as a valuable stomachic. Providing there is no organic defect, it affords a remedy for nearly all the disorders of the digestive organs, and many others already shown to spring from such source. Indeed, the diseases of indigestion, depraved secretion, imperfect nutrition, and consequent debility, constitute the greater part of the ailments human flesh is heir to; for upon the due performance of the various functions concerned in this process depends health, and even existence. Where there is bad digestion there is bad chyle, and consequently blood of a vitiated quality, unfit to repair the daily wear and tear of the system, or supply the body with healthy material;(12) the consequence of which is, neither *nervous energy* nor *healthy blood* being distributed to the several tissues and regions of the body, the system, unsupported by the proper pabulum of life, sinks into gradual decay.

(12) When the stomach is unable to perform its proper functions, the food taken therein is left to undergo precisely the same chemical changes as would take place in a similar mixture, at the same temperature, out of the stomach; such as *acetous fermentation*, and its concomitant evolution of gases. These give rise to flatulency, gripe, spasm, &c., &c., and generate those acrimonious humours which collect in the primæ viæ (or first passages), and which in lieu of proper chyle are carried into the system, thus displacing the natural constituents that abound in our tissues during health.

The remarkable improvement brought about by a course of sarsaparilla under such circumstances, from its *tonic, alterative,* and *nutritive* properties, are often most striking, in improving the blood, promoting the secretions, and changing the whole assimilative process. It appears rapidly to restore the tone of the stomach, increase the appetite, and correct chylification, while it renders both the secretions and excretions more regular, thus assisting to improve the general health and spirits, so intimately associated with the due performance of the organs and functions of digestion.

In Debility, *Tabes,* extreme emaciation, and all cases of local, nervous, or constitutional weakness, consequent on acute disease and other causes calculated to impoverish the blood or exhaust the vital powers, sarsaparilla often proves one of the most valuable restoratives we possess. No stage of debility contra-indicates its use. Indeed, it is one of the great advantages of this remedy, that it may be administered freely even in the most enfeebled and delicate condition. From its *mild* tonic effects, together with its gentle mode of operation in every respect, it may be safely employed in those sunken, irritable, and reduced states of the system, where other remedies of the class might be injurious. Appetite invariably improves under its use, while lassitude, languor, and leanness frequently give place to flesh and strength. Debility being the fruitful source of depraved secretion, disordered assimilation, and the foundation or attendant of so many forms of *chronic* and *cachectic* disease, the timely employment of a good form of sarza is often productive of a change for the better in the constitution *generally.* The patient soon becomes conscious of progressive improvement by the desire for activity and exertion, improved digestion, a more regular alimentary motion, increased muscular energy, greater weight, firmness of flesh, and freshness of complexion.

In Female Complaints, as *chlorosis, leucorrhœa, amenorrhœa, hysterical affections,* &c., and those forms of disease usually accompanied by languor, listlessness, lowness of spirits, loss of appetite, pains in the back and loins, palpitation, and many other symptoms of local, nervous, or general debility, this medicine, either alone or conjoined with *quinine,* iron, &c., frequently proves a most valuable remedy in restoring impaired health and strength, more especially in those cases accompanied with faulty secretion and a depraved condition or deficiency of the blood. This class of complaints also being commonly associated with *disordered digestion, assimilation, sanguification,* and *nutrition,* sarsaparilla, from its tonic and restorative effects on the system *generally,* seems highly appropriate. In such cases it may be employed with considerable benefit in repairing that debilitated state of the constitution that so often gives rise to *local atony* of the parts, *suppressed, profuse, irregular,* or *painful menstruation,* leucorrhœa, and many severe forms of *uterine disease,* dependent on deficient nervous energy in the various functions concerned in such process.

In Paleness, and a *waxiness of the complexion,* proceeding from deranged health, profuse evacuation, and other causes of exhaustion, accompanied by weakness, wasting, &c., the restorative properties of sarsaparilla, in promoting digestion, improving the blood, and recruiting the system generally, appears capable of effecting a vast improvement. It is particularly applicable to that state of debility (*anæmia*) so often met with in young persons, where the loss of colour of the cheeks and lips, sometimes succeeded by a *sallowness* of the complexion, indicates a deficiency of blood, or a languid and unequal circulation; in such cases a course of sarsaparilla promotes its formation, improves its condition, at the same time accelerating its more uniform distribution; hence, as already shown, it

often improves the appearance, and restores the natural healthy tint of the skin.

Incipient Consumption.—This complaint being usually connected with a *strumous diathesis* or *scrofulous* habit of body, the utility of such a medicine as sarsaparilla must be obvious, both in the *prophylactic* and *curative* treatment of the malady. In the primary stages of phthisis, pathology appears to indicate that the great object is to prevent the general strength being lowered, while at the same time we improve the secretions; and certainly, if we may measure the benefits to be derived from sarsaparilla by the unquestionable improvement brought about by its employment in other *depraved, cachectic,* and *debilitated* states of the system, we may reasonably assume it offers similar advantages in consumption, as it manifestly does in the removal of those predisposing causes calculated to mature or encourage tubercular disease, as a disordered state of the digestive organs, depraved chylification, imperfect nutrition, &c., at the same time altering and amending a scrofulous or cachectic habit of body, so favourable to the developement of the disorder. Its direct alterative and restorative effects on the blood, correcting its tuberculous condition,(13) improving its quality, &c., together with its well known property of healing internal ulcerations or lesions of structure,(14) replacing

(13) Sir Charles Scudamore, in his work on Consumption, very justly remarks, "As phthisis is essentially a constitutional complaint, not confined to the lungs alone, but depending on a *tuberculous condition of the blood,* the only chance of cure is in adopting such medicines as may tend to change the diseased condition of this fluid."

(14) Independent of its effecting changes in the blood, may not the salutary effects of sarsaparilla *on the pulmonary organs, in common with others,* be as capable of promoting the healing of ulcerations in the lungs as well as elsewhere? Many cases of recovery under its use would make

lost material, and relieving the lungs of a large share of labour by promoting cutaneous exhalation and the more genial exercise of the functions in general, render it especially adapted as a remedial agent in the management of this malady, many severe forms of which materially amend under its use. Though it may not in all cases, as in the more advanced stages of the disease, positively effect a cure, nevertheless by improving the general health, creating certain changes in the blood, and retarding the further deposit of tuberculous matter in the lungs, it may often arrest the further progress of the malady.

Many surprising cases of recovery, supposed to be beyond the reach of medical aid, have come under my own immediate observation, where, by the employment of sarsaparilla more by way of a *beverage* than a medicine, not only has marked benefit been obtained, and an improved state of health brought about, but in time the patients seemed to get the better of the disease altogether. I have often witnessed this amendment take place from its use, where patients under the ordinary remedies appeared to make little progress, and even cod-liver oil had not answered their expectations. Many of the profession have assured me of similar results; and I believe, among scrofulous and consumptive invalids it is now more extensively employed than ever. Indeed, daily instances and experience will further convince us, that *a good form of sarsaparilla*, either alone or in conjunction with other remedial agents, is capable of counteracting much mischief that might otherwise ensue; even in incurable disorganization of the lungs, or any part thereof, it enables the consumptive invalid to maintain life a long time against internal decay.

it appear so. "What is consumption," says Abernethy, in one of his Lectures, "but ulcerated tubercles of the lungs? Then if those tubercles are healed, provided the lungs are otherwise sound, the patient must get better."

A good preparation of sarsaparilla may be regarded as something more than a medicine in such cases; it is not simply *tonic* or *alterative*, but highly *nutritive*,[15]—not, as already observed, from any *amylaceous* matter it may contain; on the contrary, the more bright and clear the preparation and free from fecula, the more *fattening*;—it appears to supply the blood with some *nutritious* principle (*peculiarly its own*), and thereby the several textures of the body with *new material*. That it adds rapidly to the weight of the most lean and emaciated in scrofulous or consumptive habits, the common experiment of *weighing* during the employment of this remedy repeatedly proves.[16] But it is not alone in consumption; for it is often remarked, whatever complaints *a genuine and well-prepared* form of this medicine is prescribed in, however attenuated or reduced patients may have been rendered previously by disease, that they acquire plumpness, flesh, and strength more rapidly from sarsaparilla than any other *tonic* or *restorative* we possess. As a *nutritious drink*, independent of its medicinal properties, it may be looked upon as a grand restorative in the régime of phthisical patients generally. Where there is a deficiency of the secretions, a want of nervous energy, flaccidity of the muscular fibre, or a general falling off, it will afford stamina, infuse a stream of healthy blood through the

(15) An invalid friend, whose recovery seems almost a miracle, in a letter thus alludes to the *alimentary* properties of this medicine: "The preparation of sarsaparilla you recommended me to make trial of, I have now been taking two months, and certainly it has done more good with regard to my regaining flesh and strength, than the cod-liver oil or anything I have hitherto tried. It appears to my system more like *food* than *physic*."

(16) I have known of many, in the most lean and emaciated condition, who, having weighed themselves previous to putting sarsaparilla down in their "bill of fare," have increased in weight in an almost incredible manner.

system, and in due time clothe the attenuated limbs of the consumptive invalid with healthy vigorous musele.

The little service even the most profound medical skill can sometimes render under such distressing circumstanees, make any and every means of relief or prevention aeceptable, as an additional defence against this fatal malady. In the prophylactie treatment and primary stages of the disease, the timely employment of sarsaparilla is of the greatest service, as many remarkable instances of reeovery tend to show. In most eases the pangs and ravages of phthisis may be modified by its use, and the progress of the malady impeded, and in many instanees altogether removed. Although recovery cannot be always hoped for, still we frequently find, that by the judicious use of remedial agents like sarsaparilla, the system may be so changed and invigorated, and such an improved state of health brought about, that it may last for years, and even outlive the disease itself.(17)

Aphrodisiac Virtues.—This property of sarsaparilla does not appear to be generally known. Many medicinal substances, both of the ancients and moderns, have been said to exert this peculiar influenee over the animal eeonomy, as well as particular kinds of diet; but if any medicine is justly entitled to that claim, whether by any *special* aetion or from its direct *restorative* powers, I am prepared to prove *that* medicine is a good form of sarsaparilla. Many under its use have mentioned this faet to me; and I could recite a number of curious instances, where patients had been taking the remedy

(17) I knew a case of a whole family, of an hereditary scrofulous habit of body, who were swept off by consumption, *save one;* who, on being recommended to try "*what sarsaparilla would do,*" took to drinking it as a daily beverage, in lieu of wine or malt liquor. She has survived the rest some years, and appears at the present time to enjoy *excellent* health.

for complaints of quite a different character, and experienced this remarkable result, *after the generative powers had lain dormant for years.* Indeed, this effect goes far to establish the *general* influence of the medicine, while at the same time it is a pretty sure criterion of the quality of a preparation, as I never found it from *inferior* forms. It tends clearly to show its beneficial effects are not limited to any particular part of the system, but that it communicates viâ *the blood*, a healthy impetus and renewed vigour to every organ and function of the body.

In Invalid Health, or convalescence from acute disease, sarsaparilla, both alone and in combination with *quinine*, very frequently proves a valuable medicine for refreshing languid organs, giving tone to relaxed fibre, and recruiting declining strength. The debilitated and broken-down in health, more especially those whose constitutions have become impaired by injurious habits, irregular living, or long residence in tropical climates, derive considerable benefit from its occasional use; in such cases it frequently furnishes a highly valuable restorative and invigorating remedy.

In conjunction with *sea-bathing*, sarsaparilla has long been celebrated for its curative powers in scrofulous and cachectic disorders, and in most debilitated states of the system, especially where mercury or iodine has been employed. Likewise in local, nervous, or general weakness, white swellings, tumours, spinal affections, and many other disordered conditions of the system for which persons usually resort to the sea-side.

With *change of air* (Nature's alterative), I know of no medicine more effectual in improving the general health, under almost any form of disease. The *weakly*, *nervous*, *dyspeptic*, *gouty*, or *rheumatic*, derive double advantage from the use of sarsaparilla under these circumstances. It is also deserving of

notice as a valuable adjunct during the use of the mineral waters, as those of Bath, Cheltenham, Harrowgate, &c., in scrofulous, scorbutic, and cutaneous affections, and a multitude of chronic complaints, for which invalids annually visit the various *saline*, chalybeate, and sulphurous springs.

Exercise is highly essential during the employment of sarsaparilla, and should be resorted to daily, as it very materially increases the curative agency of this medicine, diffusing it the more effectually throughout the system. By promoting the circulation, a ready interchange of healthy blood is brought in contact with the several tissues and structures of the body, and consequently amendment in many forms of disease is effected more rapidly. Thus we often find travelling, change of air, or a trip to a watering place, with a good form of sarsaparilla, do more for a patient in six weeks, than we could accomplish by other means in as many months. I have known many invalids, in a comparatively short time, restored to sound and vigorous health by this simple plan of treatment, without the aid of any other medicine.

The Skin.—Cleanliness of the surface is indispensable during a course of sarsaparilla, as also a frequent change of undergarments, in order to remove the morbid humours of the blood eliminated by this channel, continually making their exit through the emunctory outlets of the skin, and consequently absorbed by the apparel. In genial weather bathing may be conjoined, and at other seasons *walking exercise* with warm clothing; friction with a coarse towel will at all times promote and assist its sudorific action.

Taking it regularly.—This is of paramount importance, that the system may be kept continually under its influence, especially in complaints of long standing and perhaps deeply rooted in the system, that require a thorough change in the constitution to be carried out before amendment takes place. A few

odd doses will effect little. To obtain the full benefit derivable from its use, it should be taken daily *at a stated time*—the first dose on rising in the morning, and the others about an hour before each meal, and its regular use persevered in for a short time. Six weeks is what is usually called a course;[18] but in some cases it should be continued much longer. When the symptoms disappear for which it has been prescribed, it should by no means be left off *suddenly*, but discontinued *by degrees*, being a medicine much missed by the stomach.

Sarsaparilla is commonly employed with a great many other medicines, as *mercurials, antimonials*, the *iodides, iron, quinine*, &c. But it is not necessary the preparation should in all cases form the *vehicle* of these. Patients generally prefer them separate, as they render the sarsaparilla (which should be taken more by way of a beverage) *less palatable*. They are equally effectual if taken a short time previous or even washed down with the sarza; which has this advantage, that after such remedies have produced the desired effect in the system, the remainder of the sarsaparilla still serves as a tonic and restorative to complete the cure.

All that now remains to be observed is, that whatever form of disease sarsaparilla may be advised or recommended in, to insure its success as a remedy, we must in the first instance secure a good form of the medicine; for according to the

(18) Monardes informs us, that the Indians, when they begin to use it, drink nothing but the decoction for the first five days, and live upon almonds, raisins, and bread during thirty days, which they consider a *course*. But *he* recommends good meat, poultry more especially, *but no wine*—nothing but the sarsaparilla, as an ordinary beverage, both at dinner and supper; a frequent change of under-clothing during its use; *and a purge previous to commencing it*. He states in his book, "In this manner, in fifteen or twenty daies, they are healed of all their evils and diseases."

quality of the preparation alone can we compute the chance of cure. The *cheapest* is often the *dearest* in the end, in medicine as in most things. Many articles, we must remember, sold under its *name*, are not only worthless but positively *injurious;* even its legitimate forms so differ in their effects, from the causes before assigned, that the majority fall far short of what we might expect from a better preparation of the root, and to this fact we may ascribe the great discrepancy of opinion on the merits and demerits of this drug. But it is not the fault of the medicine, as already shown; for, since the introduction of some improved forms, so successfully has it been employed in a multitude of complaints in which it had been lost sight of, that many of the profession who before had little faith in sarza have since become its warmest advocates.

That there may be many good forms of the medicine, I am ready to admit; but, on the other hand, many are comparatively useless; while I find a vast number most disagreeable and nauseous—half *fecula*, and from their liability to acetous fermentation and decomposition,[19] unfit for even a healthy stomach, leave alone that of an invalid. From the nauseating effects of these, many have been led to believe (after a few doses) their stomachs would not bear the medicine, and have consequently given it up. Now a good preparation of sarsaparilla has none of these objections; on the contrary, it is altogether as palatable and agreeable. This fact fully justifies me in calling the reader's attention to that form of the medicine most likely to answer the desired end, and at the same time

(19) Few of the ordinary preparations of sarsaparilla, I find, will keep any length of time, after the cork has been once withdrawn; spontaneous decomposition rapidly takes place, and in a few days renders it unfit for use. Now I have repeatedly proved this to be the very opposite of a good form of sarza (such as the Compound Fluid Extract before referred to); age improves it—like wine, the older it gets, the better.

sufficiently accounts for my making mention of any *special* preparation, which under all the circumstances of the case seems neither out of place nor uncalled-for; indeed, after all that has been said on the subject, to conclude the work without pointing out some approved form, would just be to leave the public where they were. This not being my intention, and the work being more particularly designed for the guidance of those in a measure ignorant on these matters, if it is really to be of any *practical* utility, such an addition can only render it the more perfect, and of real service to those in search of the benefits to be derived from the use of this truly valuable remedy when administered under proper circumstances. Besides, daily witnessing the deception and imposition practised upon the public in the name of this medicine, and people swallowing such *deleterious nostrums* under the plausible title of sarsaparilla, I do not think its *legitimate* and *genuine* forms should be "hid under a bushel."

The Preparation of Sarsaparilla I would more particularly recommend is the Compound Fluid Extract previously mentioned (page 37). In again referring to it, I do so in full confidence, that (in comparative trial with any other) it will be found the most efficient form of the medicine in use. I may also add, I have taken it myself, and prescribed it with the same benefit to others; and, I believe, my opinion of its merits may be strengthened by a large majority of the most eminent of the medical profession, who for the last few years have given it a decided preference, and employed it with marked success in many obstinate and intractable forms of disease, where the ordinary preparations of sarsaparilla seemed of little service. It may be obtained of Mr. Keating, Chemist, St. Paul's Church-yard.

At first sight this preparation may appear rather expensive, though, as a *concentrated* form of sarza, *necessarily so,*

owing to its greater strength as well as purity; but in the end it will be found the cheapest — a table-spoonful being equivalent to a pint of any of the cheaper forms of the medicine, and, I need hardly add, far more efficacious. *When ordered in prescription,* in some instances I find it is not only necessary to name the particular kind ("D'Vere's Fluid Extract"), but at the same time to see no other is substituted in place of it, as it is not sold by *all* chemists, owing to the inability of the proprietor to allow so large a per-centage as inferior preparations of the kind would afford. The best plan appears to be for persons to procure it themselves, in bottle, *unopened.* It may always be had genuine as above; and, by order, of most of the first-class dispensing chemists, as Bells, Godfrey & Cooke, and others.

MEDICAL OPINIONS

ON THE REMEDIAL VIRTUES OF

SARSAPARILLA.

GERARDE, in his *Medical Botany*, 1597, says of sarsaparilla, that "having failed as a *specific* in certain forms of disease," (from the difference of climate, as he supposed) "many for a time denied it having any virtue at all. However, notwithstanding this hasty conclusion, it was afterwards discovered, from frequent experience, to be of considerable service, from its diaphoretic effects, in divers disorders dependent upon a bad habit of body or disordered condition of the blood."

The Botanist's Dictionary, by MILLER, 1731, under the head of Sarsaparilla, says, "This root is highly recommended in rheumatic affections, scrofula, and cutaneous complaints, and in most disorders where an acrimony of the fluids prevails."

BLACKWELL'S *Herbal*, 1737, "On the most Useful Plants now employed in the Practice of Physic," observes, "The sarsaparilla root is attenuating and sudorific. Much used in *diet drinks*. Is accounted a great sweetener of the blood, and very serviceable in gout, rheumatism, scurvy, and king's evil."

Lewis, in his *Materia Medica*, 1768, speaking of the properties of sarsaparilla, remarks:—"Although perhaps unequal to the character of a *specific*, as at first supposed, it appears however from experience, that the decoction drunk plentifully and daily continued is of very considerable service in promoting perspiration, and what is called '*sweetening*' or purifying the blood and humours."

Sir Wm. Fordyce.—"I have found it relieve many painful symptoms other remedies failed in, and, when for a time continued, radically cure them. In consumptive habits it is the greatest restorer of the appetite, flesh, colour, and strength I know of."

Abernethy.—"I generally order my patients to drink half-a-pint of sarsaparilla three times a day, or more if they like it. I saw it make a *wonderful* change in a person who applied to me pale and emaciated, who increased fifteen pounds in weight every week, and soon got well. I know a case of a gentleman whose appetite had failed; he took it for a short time, and was *actually* able to eat a pound of beef-steaks for his breakfast, and became stout and strong."—Abernethy's *Lectures on Pathology.*

Mr. Pearson was of opinion, "That many forms of disease exasperated by mercury might be benefited by sarsaparilla, as nocturnal pains in the limbs, enlargement of the joints, membranous nodes, cutaneous ulcerations, &c." He also observes, "That its beneficial effects are frequently demonstrated in the treatment of foul untractable spreading sores, and in more than one form of scrofula; it is also capable of freeing the patient from what may be called the *sequelæ* of a mercurial course."

Dr. Hancock observes, "The narrow views and vain discussions about the *specific action* of sarza in syphilis have had the effect of keeping down its character as a *great and useful remedy.* It is to the want of a proper regimen under its use, the introduc-

tion of spurious kinds, together with the faulty modes of preparing it, we may attribute the frequent failures which many complain of. But, genuine and well-prepared, it is remarkable for its alterative and restorative properties, and as an anti-cachectic remedy, and one of great power in *gout*, *chronic rheumatism*, *cutaneous eruptions*, and external or internal ulceration (even of the lungs). It operates without deranging the general health, forms the best remedy against the ill-effects of mercury, and, alternated with *antimonials*, *alkalies*, *chalybeates*, *iodine*, &c., affords a method of treatment in cachectic diseases, *glandular*, *scorbutic*, *cutaneous*, or *scrofulous affections*, that may be resorted to with much confidence. It manifests a peculiar power in healing all ulcers, removing a multitude of chronical complaints, altering and amending the habit of body, and improving the condition of the blood."

The same gentleman, speaking of a species of chronic rheumatism (from the suppression of another form of disease) attacking the muscles, the ligaments, and periosteum, whereby the joints are rendered immovable, and the patient quite crippled and emaciated, adds, that such was his own case during a residence in British Guiana, and after a full trial of mercury and the usual European remedies, he was completely restored to health by sarsaparilla.—*Vide Medico-Botanical Transactions.*

Brande, in his *Dictionary of Materia Medica*, observes, "Though the virtues of sarsaparilla have been very differently estimated, the evidence is decidedly in its favour as a *valuable alterative* in chronic rheumatism, in obstinate cutaneous eruptions, indolent ulcers, glandular affections, diseases of the periosteum and bone, attended with obscure pains, wasting of the flesh, tenderness of the part, tumours, &c., and in that state of habit termed by medical men *cachexia*. In such cases sarsaparilla often proves a valuable remedy, and sometimes effects a cure when other alteratives have long been administered in vain, and where the diseased state of the system has been of many years duration.

. But, it may be well to remark, that, to insure success, attention must be paid *both to the quality of the sarsaparilla and to its preparation*. It must be taken in large doses, and for a long time: hence the advantage of the concentrated forms, as the *Fluid Extract*. Inattention to the quality of the drug, administering it in insufficient quantity, and the want of perseverance in its use, are, I think, the sources of those opinions of its ineffieacy we often hear quoted; while, in accordance with the above rules, sarsaparilla possesses restorative powers not hitherto observed in any other article of the *Materia Medica*."

Mr. Green.—"It increases the vigour of the system, without quickening the pulse; producing increase of tone without increase of action. The good effects of this medicine are so obvious in some cases, that it appears to possess a specific effect over many diseases. Amongst the remedies we possess, experience warrants my saying, it stands first; and there are but few good practitioners in London who do not attribute much efficacy to it."—*Lectures of* Professor Green, *King's College*.

Mr. Travers.—"It is in the strictest sense a tonic, with this valuable attribute, that it is applicable to a state of the system so sunken and irritable as renders other substances of the tonic class unavailable and injurious."

Mr. Bacot mentions the case of a patient in whom mercury was productive of most serious consequences, colliquative sweats, loss of appetite, and rapid waste of flesh, with nocturnal pains so severe that no language could be too strong to express his suffering. "Opium afforded no relief. A pint of the simple decoction was given each day *uninterruptedly* for five weeks (*accompanied by no other medicine*), at the end of which time all the symptoms were removed."

Dr. Good says, "I have chiefly found it succeed in chronic cases, where the constitution has been broken down, perhaps equally beneath a long domination of the disease and a protracted and apparently inefficient mercurial course. In connection with a milk diet, country air, and a total abandonment of mercury, I have found it of essential importance, and have seen an incipient hectic fall before the free use of it in a week."

Dr. Dickson remarks, "That the virtues of sarsaparilla are the subject of much diversity of opinion, partly owing to its being employed in different diseases by the one set from those in which it is used by the other, and still more to inherent differences in the *particular root used;* but a more important difference exists *in the mode of preparing it for administration.* When properly prepared, and administered in suitable cases, no one can doubt the efficacy of sarsaparilla. From its high price and great consumption, attempts have been made in many of the great hospitals to dispense with it or to discover a cheap substitute, *but without success."—Materia Medica, and Therapeutics, Cyclopœdia.*

Dr. Copland states, that he has found the Compound Decoction of Sarsaparilla, or the *Fluid Extract*, when *diluted*, "one of the best medicines for the cure of the chronic and sub-acute forms of chronic rheumatism." In order to secure its good effects, he says, "the functions of the skin should be freely promoted by exercise in the open air, and the other secretions and excretions also receive due attention." (*This physician appears to agree with the author in recommending it in some cases to be taken* WARM, *when a more decided effect is to be produced on the skin.*)—*Dictionary of Practical Medicine.*

Mr. Lawrence considers the circumstances under which sarsaparilla is of service to be where the constitution has become enfeebled either by long continuance or repeated attacks of disease, the injudicious use of mercury, &c., where the general powers of

the system give way, and where there is loss of flesh and strength. "It is in these cases sarsaparilla is of particular efficacy." He remarks, "In what manner it exercises an influence on the constitution capable of producing these beneficial effects, I must confess, is a question very difficult to answer, as a healthy person may take two or three pints of the decoction and experience no effect whatever; it seems to exert no sensible difference on the animal economy. However, we do see patients under circumstances of the most alarming indisposition sometimes recover, and that *speedily*, under the exhibition of this medicine. Therefore, although we cannot absolutely point out the manner in which the remedy operates, we are not on that account to withhold our confidence in its power."—*Lectures on Surgery.*

Dr. Pereira remarks in regard to this medicine, "So often has it been found that various diseases, which had resisted all other tried remedial means, and were gradually increasing, became stationary, and afterwards subsided, under the use of sarsaparilla, that a large majority of British surgeons (including the most eminent of the present day) have been compelled to admit its therapeutic powers. In some conditions of the system it acts as a powerful and valuable alterative and tonic. Its continued use is attended with improvement of appetite and digestion, augmentation of strength, increase of flesh, the production of a more healthy tone of mind, and the complete disappearance of various morbid symptoms, as eruptions, ulcerations, pains of a rheumatic character, &c. Its best effects are seen in those depraved conditions of the system which the public ascribe to a deranged condition of the fluids. In chronic rheumatism—in obstinate skin diseases—in cachectic conditions of the system generally, it may be given with the best effects."—*Elements of Materia Medica.*

Dr. Graham says, "Sarsaparilla acts as a diaphoretic and alterative, and is of the greatest service in the treatment of chronic rheumatism, cutaneous eruptions, the advanced stages of indiges-

tion, and many very severe local diseases originating in disorders of the eonstitution. In my opinion it is frequently of ineomparable utility in ehronie diseases, even when used *alone*, and eertainly of great assistanee in promoting the eurative effects of *other alteratives* in many eomplaints."—*Domestie Medieine.*

Dr. Hooper, speaking of anti-serofulous speeifies, observes, " Sarsaparilla has long been esteemed as highly beneficial, so mueh so, that there are few eases of this disease that have not been treated with it. But here again everything depends upon having the root of the true plant; and there is not one perhaps in the *Materia Mediea* more adulterated—so mueh so, that little dependenee ean be plaeed upon any of its preparations, unless made *under proper inspeetion, or obtained from some trustworthy souree."—Medieal Dictionary.*

THE SO-CALLED OR

SHAM SARSAPARILLA.

" What's in a name ?"

" When a man says, 'This is bread,' let it be bread ;
When wine, let it be wine."—*Old Spanish Proverb.*

To conclude a work on the subject of Sarsaparilla without a word or two on the notorious quack nostrums at present paraded before the public under the pretended title of this medicine, would in a measure render it, as a *popular guide*, incomplete, if not *minus* the most important point under consideration ; in fact, the very prevalence of these impositions first suggested its publication, not only as a means of making more generally known the nature, properties, and uses of the *genuine* form of this medicine, but more especially to point out to unsuspecting persons the serious injury they may inflict on themselves by swallowing those *spurious compounds put forth in its name.*

That these deceptions are productive of much mischief there can be no question, inasmuch as they protract the sufferings of persons labouring under various forms of disease wherein the proper medicine might prove of the greatest service. But their deleterious nature is a far more serious matter ; indeed, it is an imposition pregnant with so much danger, that it is wondered at by everybody acquainted with the fact, the authorities permit it to continue. The laxity of legislation in regard to such matters leaves society wholly at the mercy of such pretenders, no matter

the amount of mischief they may give rise to in the long run. Slow poison does not kill outright, and the law takes cognizance of nothing short of manslaughter. If it was not for the press, the unconscious public might still go on imbibing this "*perilous stuff*," until one half the population were *salivated*, without being able to account for it. However, a timely hint may cause many to pause before they suffer their stomachs to become the receptacle of this trash, while at the same time it may serve as a check to such unprincipled schemes, which, grand as they may appear to the gaping crowd, are no sooner seen through than they sink into insignificance as suddenly as they rose to view.

In favour of these fraudulent designs, unfortunately it so happens, in regard to *popular medicines*, like popular men, a good name goes a great way, and in the eyes of the multitude often gives a gross deception the appearance of the *genuine*. But "What's in a name?" when we are palpably imposed upon by a spurious something having not the shadow of relation or resemblance to the article we are in search of. Such is the case in the present instance; and perhaps a more *plausible* piece of quackery could not have possibly been contrived, than the choice of this *taking* (or rather we may say in such a deception) *taking-in* title, as a cover to this *so-called* Sarsaparilla. Popular credulity appears almost to encourage such impositions. *The mere name upon the bottle* seems all that one-half of the world go by. As to the nature of its *contents* (whatever it may be composed of), the question never once enters their heads. In the blind belief that it is *what it decidedly is not*, they swallow it, and by and bye find out their mistake. But this little troubles the conscience of the quack, whose business it is to make common property of *physic* and *physicians*, selecting the *names* of either most calculated to answer his selfish ends; so that in the same way that we have a sham Locock, Liston, or Brodie, we have also a sham Sarsaparilla.

Taking advantage of the reputation this medicine has acquired in its *genuine* forms, within the last two or three years a number

of *showily fitted-up shops* have made their appearance in this metropolis, for the sole purpose of palming upon the public these quack nostrums under the name of "SARSAPARILLA." Now, in regard to the nature of these *wonderful cheap* substitutes for that medicine, although the community at large are unacquainted with their composition, the faculty have long been aware of the fact, that the only claim such imitations have to the title they so surreptitiously assume, *consists in the name.* In lieu of being an extract of sarsaparilla (the root of *the medicinal or officinal smilax*), or prepared from anything having the slightest affinity to that drug, they simply consist of a decoction of a *common herb* (*Aralia nudicaulis*) flavoured with benzoin. Nor is that all. If it ended here it would be well; we should then only have to quarrel with the imposition on the *pocket*, not the *person*, as these *precious decoctions* would be, comparatively speaking, about as harmless and efficacious as *cabbage water;* but, to preserve them from *decomposition*, a *quantum sufficit* of the bichloride of mercury (*corrosive sublimate*) completes the formula of these *deadly compounds!*

Although this species of quackery is of recent introduction here, it appears nothing new on the other side of the Atlantic; nor are the component parts of such nostrums any particular secret, as the following extract from a New York paper in my possession will show: "We think this *pretended* sarsaparilla a base imposition, calculated to deceive the public, and inflict serious injury on some of our fellow-creatures. One of our chief physicians has informed us, that it must be very base in a chemist to sell it, or to lend his name in any way whatever to such *dangerous* nostrums; for, says he, I found sufficient bichloride of mercury in a single bottle to form a yellow wash!!! Now, you all know what a yellow wash is?(1)

(1) A common lotion formed by the bichloride of mercury (or corrosive sublimate) and lime water, *decomposition* rendering it *yellow*. Externally used as an application to foul phagedenic ulcers, but not very safe; internally, *poisonous!*

Besides these sham Sarsaparilla Establishments themselves, there is searcely a seeond-rate chemist's or druggist's shop in London—east, west, north, or south—where you may not find some of this spurious article in the window, while an equally bountiful supply seems kept up in our various provincial towns. In short, unlike the *genuine* medicine in whose name it is so ostentatiously set forth, in lieu of *fattening*, it may be said to be *thinning* the population from John O'Groat's to the Land's End. Few of the more respeetable chemists, it is true, will risk their reputation by selling it, as, from the priee eharged and the enormous per-centage allowed, they are well aware they would be imposing upon the public not only a worthless, but a *dangerous* counterfeit. That it is not sarsaparilla we want very little evidence to show, save our own *senses;* both *taste* and *smell* at once assure us that it is totally different from anything of the kind, and has not the slightest resemblance to any legitimate form of the medieine. But what of that? many will say: "See how eheap it is." True, and too eheap to be good. For my own part, from an analysis of some of it, I should think it *dear at any price.*

The low figure at whieh *these pretended Extraets of Sarsaparilla* are proffered to the publie, may be a great temptation to the simple and unsuspecting; but it at onee arouses the suspicion of the better informed, or any person in the slightest degree acquainted with the eost priee of the *genuine artiele;* indeed, they want little else to convince them that it is a fraud *on the face of it.* Was it really what these pretenders would lead the gullible portion of the eommunity to believe, in lieu of a *few shillings*, a quart of Pure Fluid Extract of Sarsaparilla would just cost themselves close upon a pound to prepare it; the truth is, it is not even a *deeoetion* of sarsaparilla, let alone an *extraet.*

There is such a thing sometimes as *honesty in quaekery.* As already shown, sarsaparilla has from time to time formed the basis of many famous empirical preparations, as the *Rob of Laffecteur, Sirop de Cuisinier*, &e.; but that is not the ease here. Though

so plausibly put forth in the name of this medicine, not a particle of sarsaparilla enters into the composition of these American nostrums; in fact, it is a great sham, and under such a very thin skin that it must ultimately ooze out; and when it does, "Othello's occupation's gone;" nor will he be able to add, "I've done the state some service," save in *stamps*, which such gentry I presume look upon as a sort of game certificate, *or licence to kill.* (2)

"Man," says D'Alembert, "is fire for falsehood, and ice for truth." And so it seems; for *quackery* and *deception* will do far more for a *downright fraud* than the plain honest truth can accomplish for the genuine thing. Gullibility, it appears, has no bounds. The gaping crowd, lured by empty puff and *gaudy show*, swallow one gross delusion after another; and so they will do sham sarsaparilla, until one day they find their gums sore, their glands swollen, their teeth loose, and sundry misgivings of something wrong—in short, their systems under the mischievous influence of that very *minero-metallic poison* the true medicine is administered as an antidote to. (3) In pure simplicity and ignorance, perhaps, people are not so much to blame; but when those who should know better continue to swallow such poisonous trash, simply because it is cheap, or that they get a great quantity for a little money, there is no pity for them; they must put up with the consequences. Popular credulity affords such a wide scope for these

(2) Although nostrums under the name of Sarsaparilla bear a medicine stamp, no legitimate form of that drug, decoction, or extract, compound or simple, according to the Pharmacopœia, really requires such an appendage; it would only stamp it as a quack medicine. No respectable chemist ever places such a thing on a *genuine* preparation, nor was it ever intended; it applies strictly to a *nostrum.*

(3) Query: On many of these so-called Sarsaparillas you may read, "Does not contain mercury." What does this mean? What has mercury to do with a genuine form of sarsaparilla? it does not constitute one of the ingredients in any form of the Pharmacopœias. But it wants no analysis to show they do contain that mineral; by decomposition it may frequently be found precipitated in the form of a white powder at the bottom of the bottle.

schemes, that, as long as rogues or impostors can find fools for customers, they will continue to practise such a profitable calling, dispensing death for the million, regardless of the consequences. As to remorse of conscience, these men have none.

Rational people, at a passing glance, would say, such a monstrous piece of quackery must be its own defeat. In the end it may. But rational people are sometimes wrong;—and why? because the majority of mankind abandon common sense, and thereby render themselves a ready prey to such pretenders, as the old story goes on to show. "How many persons per day," said one of these quacks to a celebrated physician who rebuked him for following such a dishonest calling, "do you think pass my door?" "Perhaps 20,000," said the physician. "And how many of these possess the proper use of their senses and a sound reflection?" "Five hundred." "Too many," said the quack; "guess again." "A hundred," replied the doctor. "Say ten," responded the quack. "Then allow me to levy on these 19,990 fools the tribute they owe me, and I have no objection to the ten having in you all that confidence you assuredly deserve."

"The world seems naturally averse
To all the truth it sees and hears;
But swallows nonsense and a lie
With greediness and gluttony."



THE END.

PRINTED BY R. MACDONALD, 30, GREAT SUTTON STREET.

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